



DOCKET NO: P00663.70019.US (RMA)

8/ formal drawings
Stephan
10-29-02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Blackadar, et al.
Serial No: 09/643,191
Confirmation No: 8703
Filing Date: August 21, 2000
For: MONITORING ACTIVITY OF A USER IN LOCOMOTION ON FOOT

Examiner: Hal Wachsman
Art Unit: 2857

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Paula K. Wisniewski
Signature

Attn: Official Draftsperson
Commissioner for Patents
Washington, DC 20231


REQUEST FOR APPROVAL AND ENTRY OF FORMAL DRAWINGS

Sir:

Enclosed for filing are forty-two (42) sheets of FORMAL DRAWINGS, Figures 1 through 41, for the above-referenced patent application.

The Commissioner is hereby authorized to charge any fees which may be required to Deposit Account No. 23/2825.

Respectfully submitted,
Thomas P. Blackadar, et al., Applicant


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Telephone: (617) 720-3500

Docket No.: P00663.70019 (RMA)
Date: October 18, 2002
xxNDD
651388.1

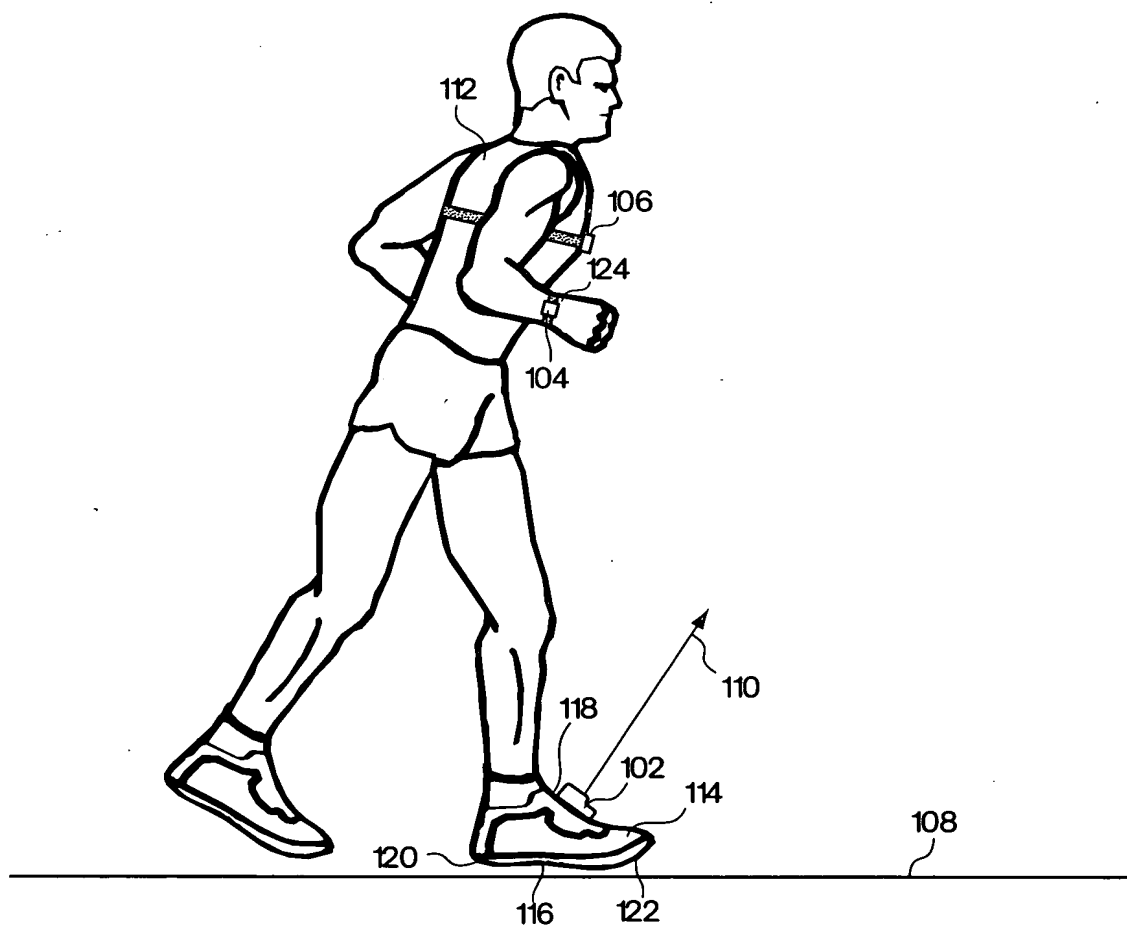


Fig. 1

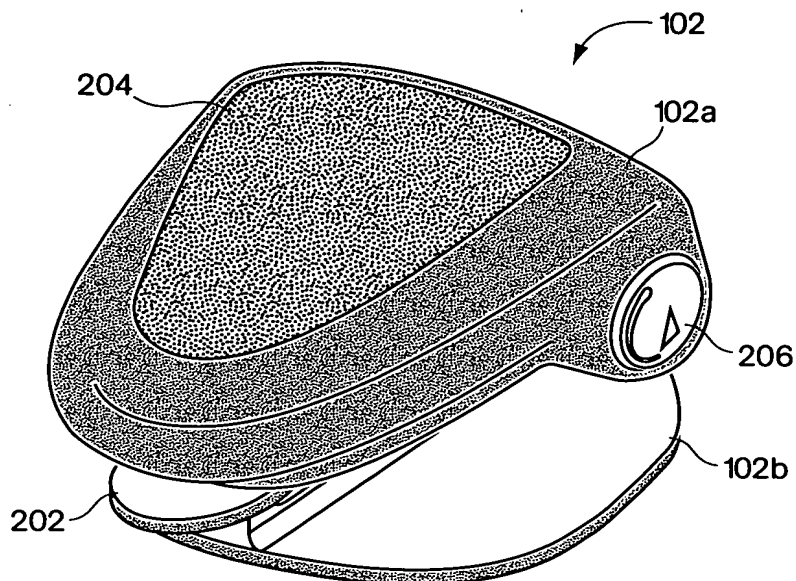


Fig. 2A

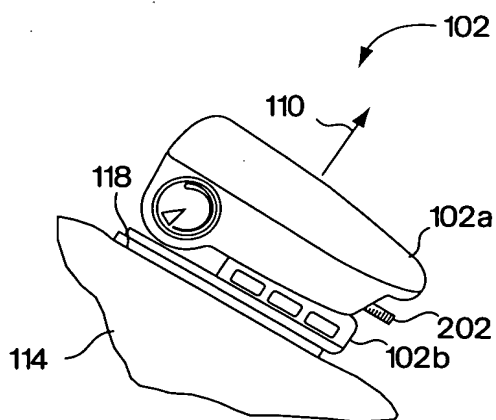


Fig. 2B



3/42

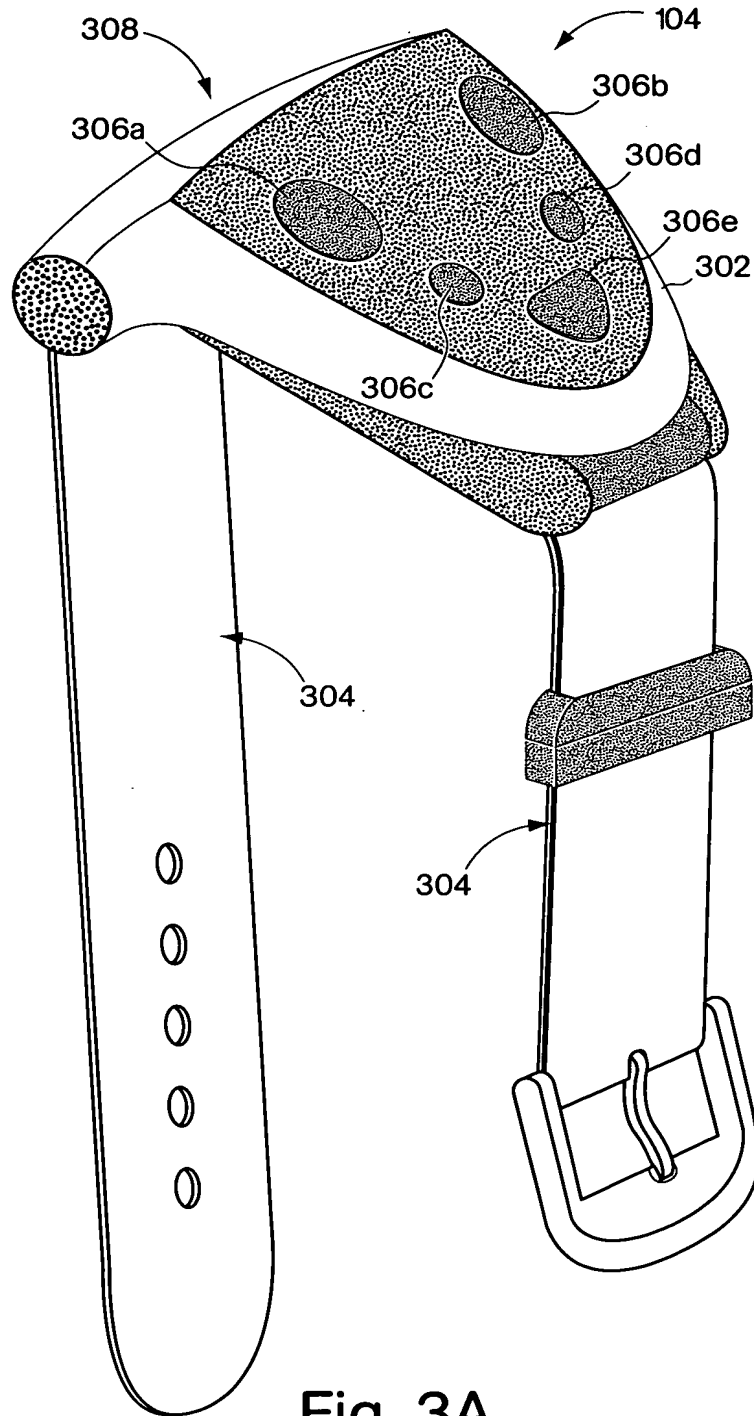


Fig. 3A

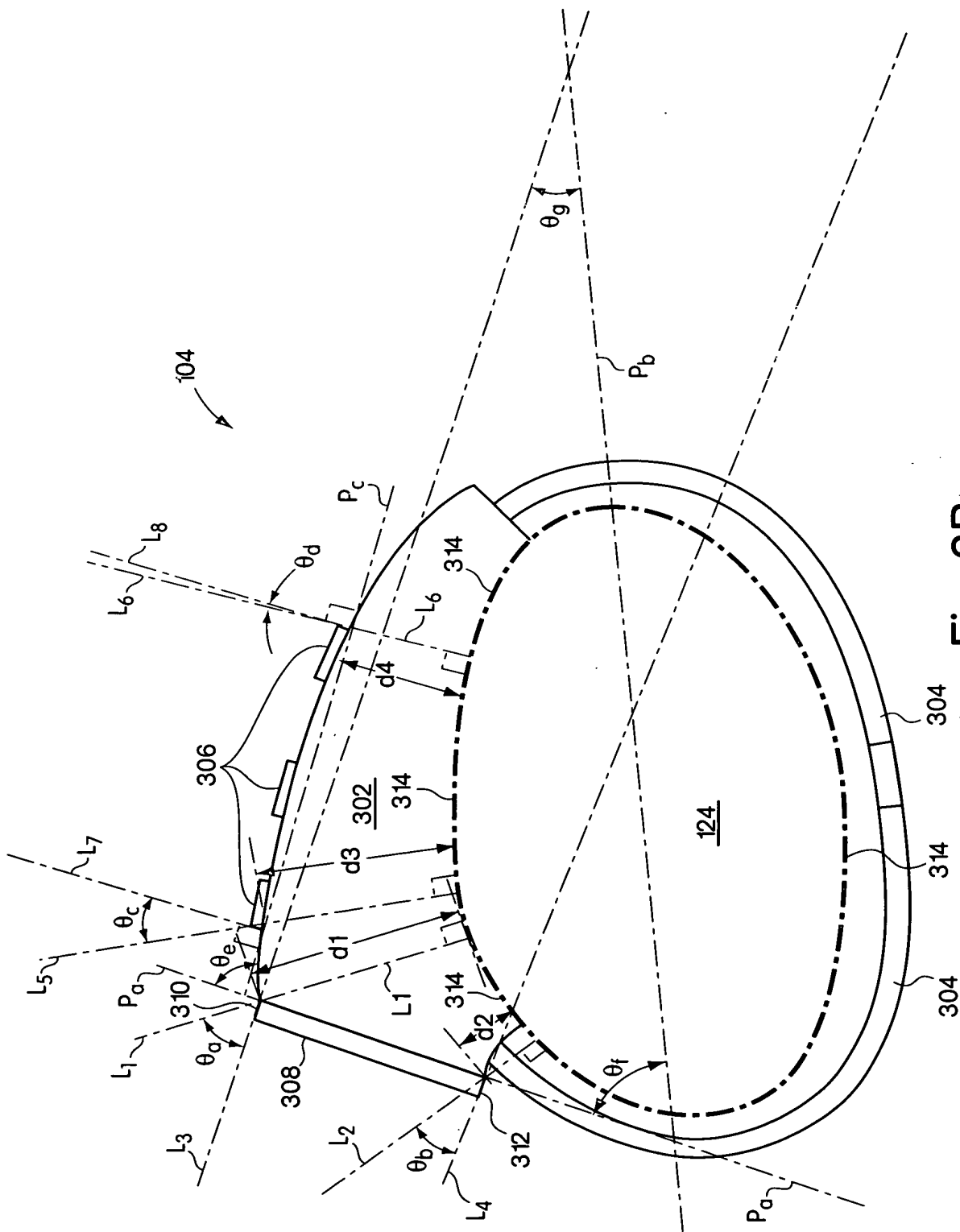


Fig. 3B



5/42

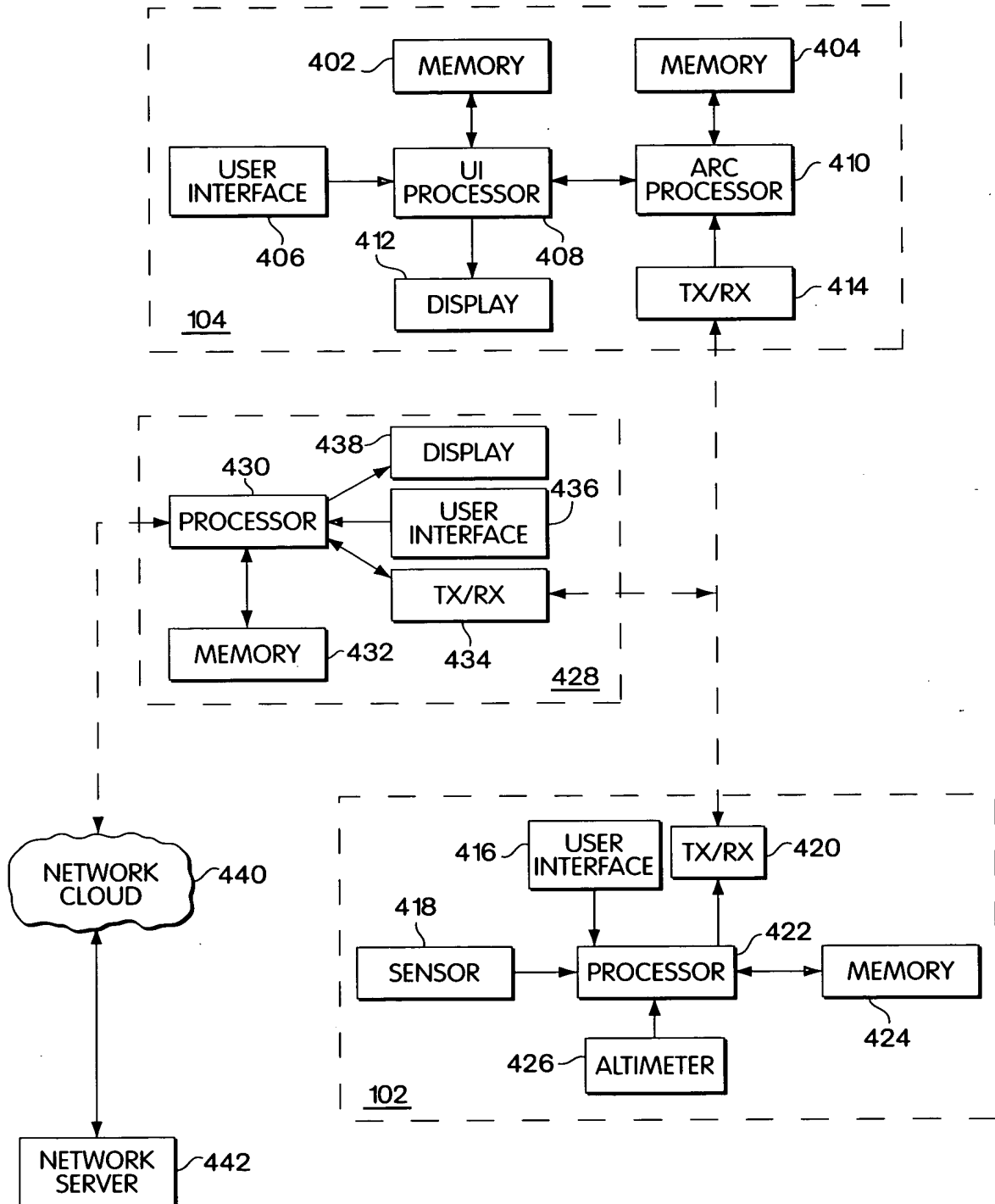


Fig. 4



6/42

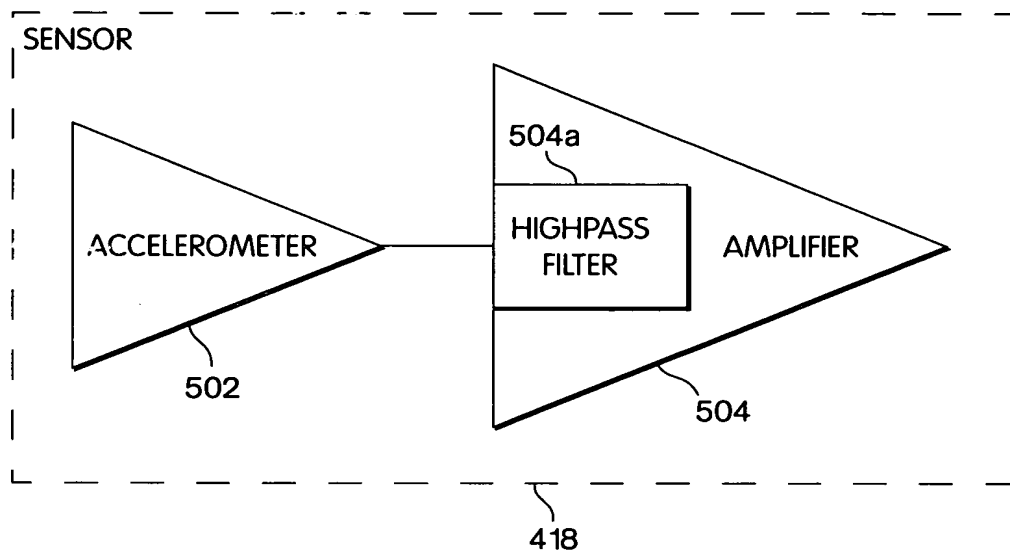


Fig. 5

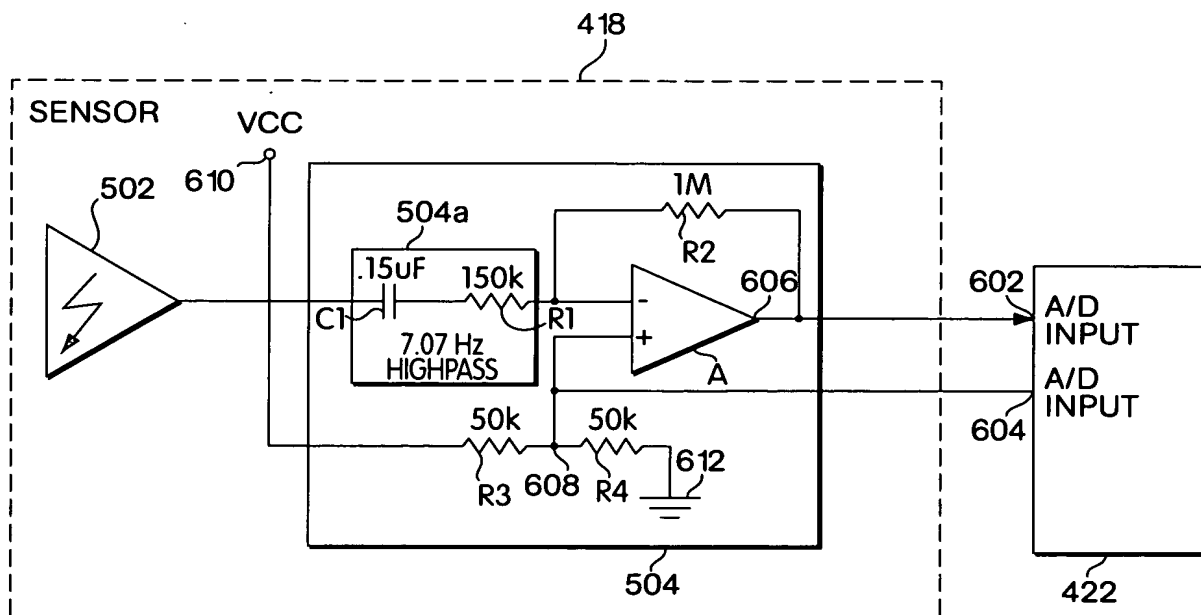


Fig. 6



7/42

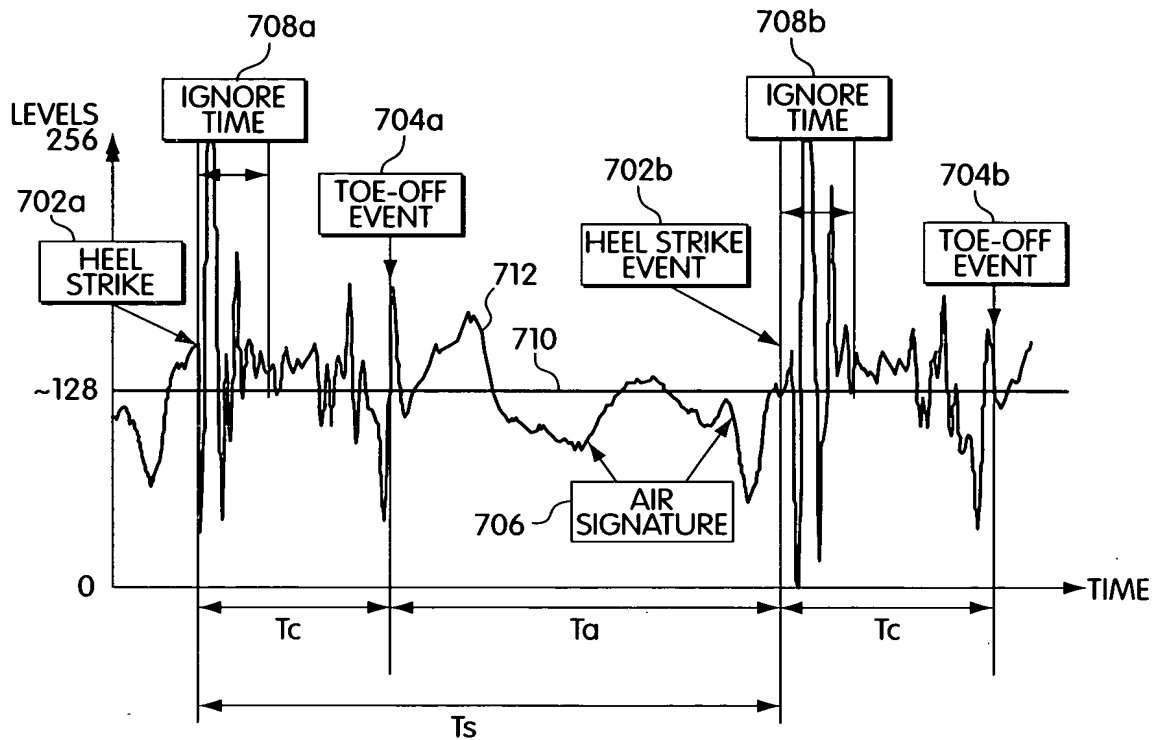


Fig. 7

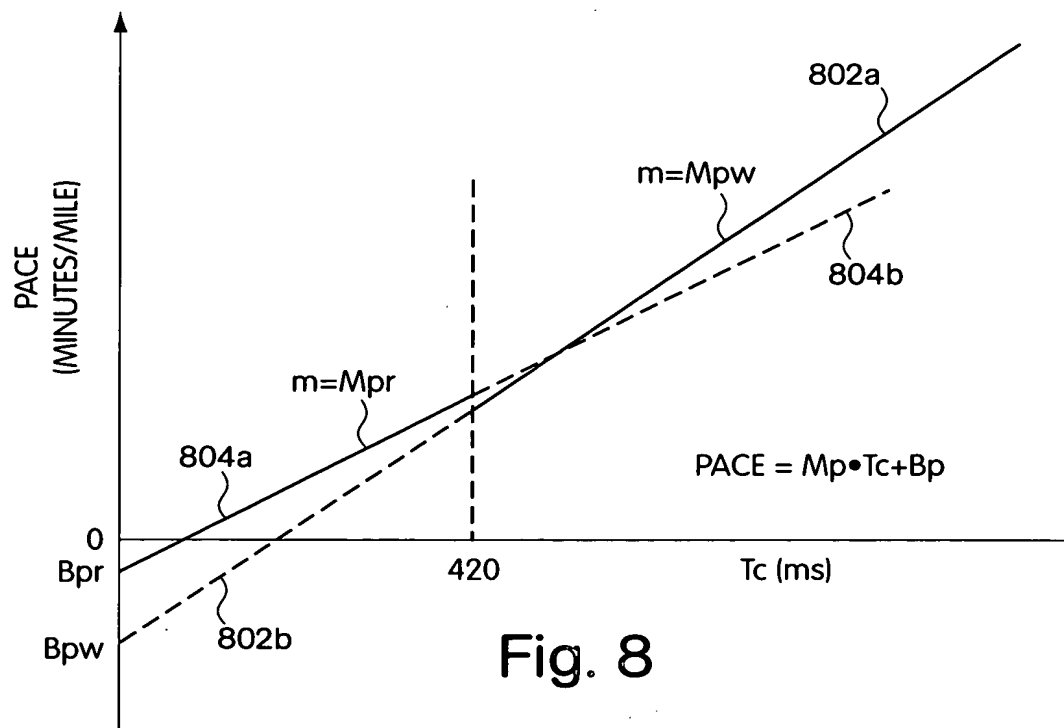
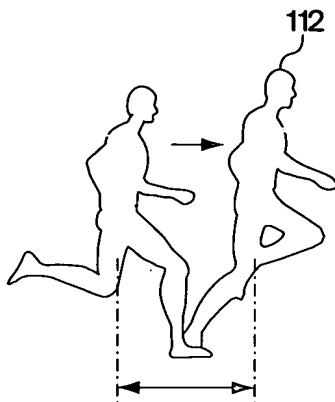


Fig. 8



8/42



$$\text{STEP LENGTH (L}_s\text{)} = T_c \cdot \text{SPEED}$$

Fig. 9

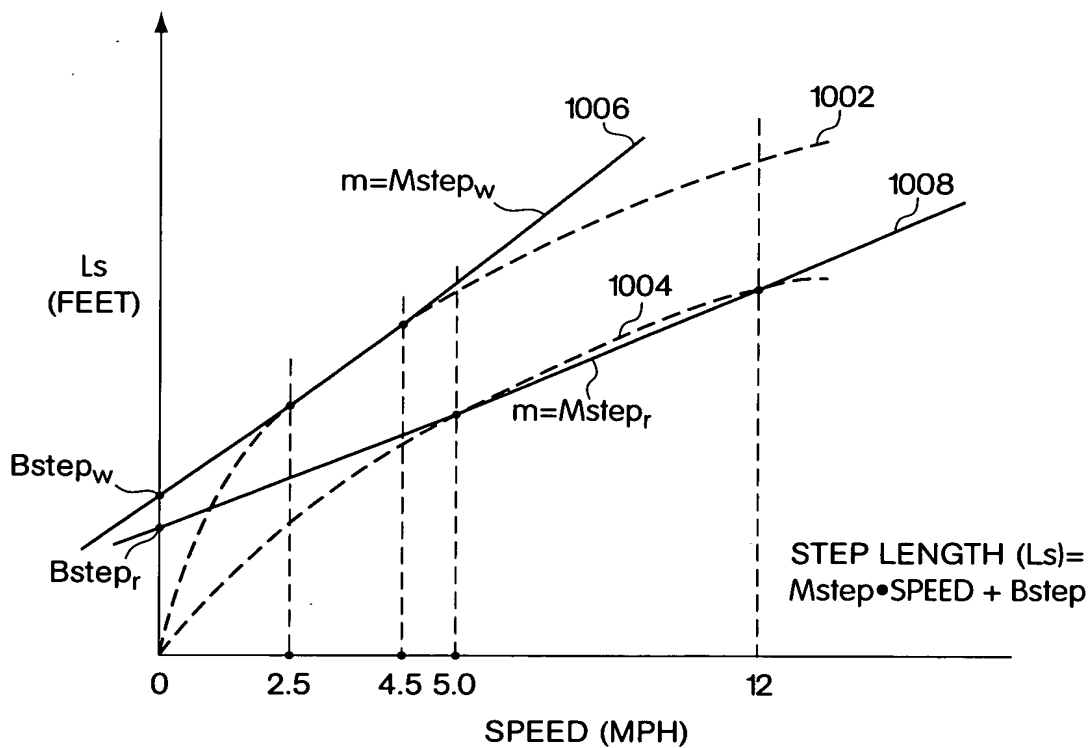


Fig. 10



9/42

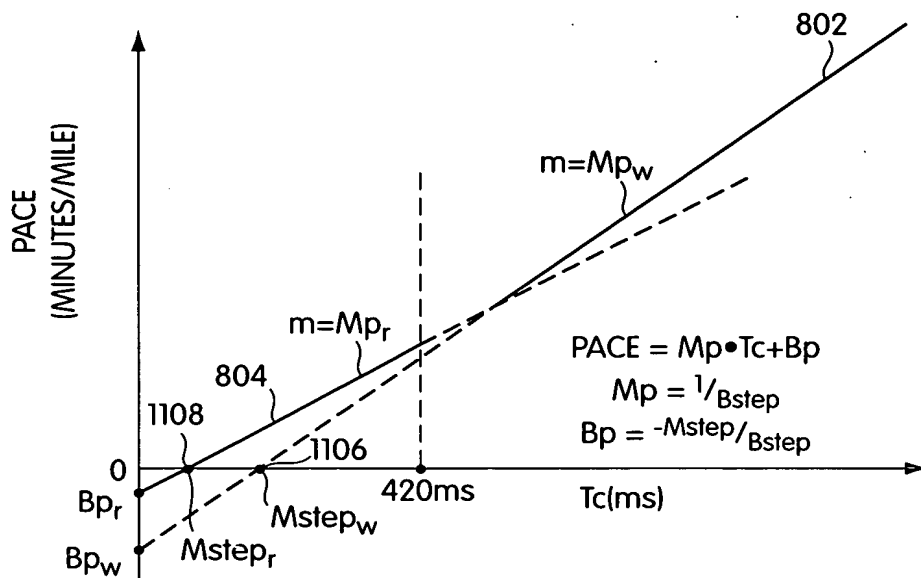


Fig. 11

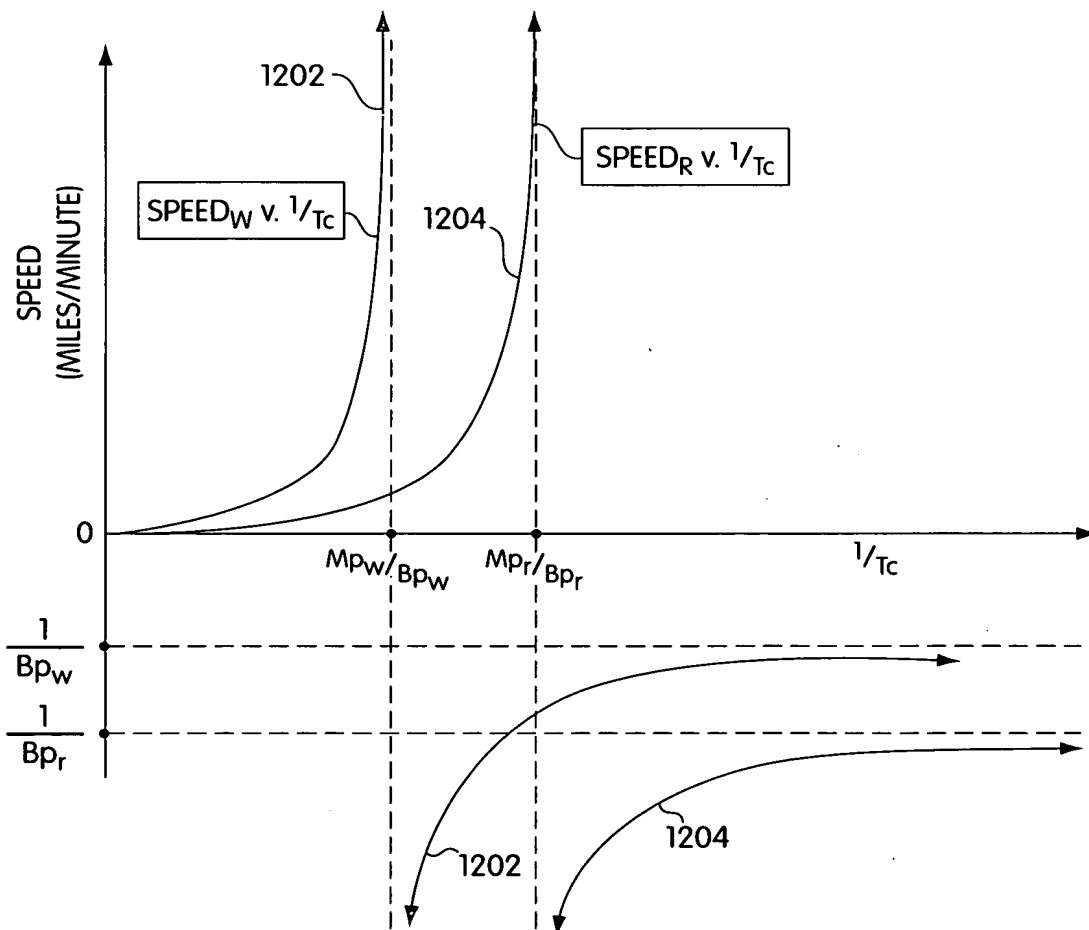


Fig. 12

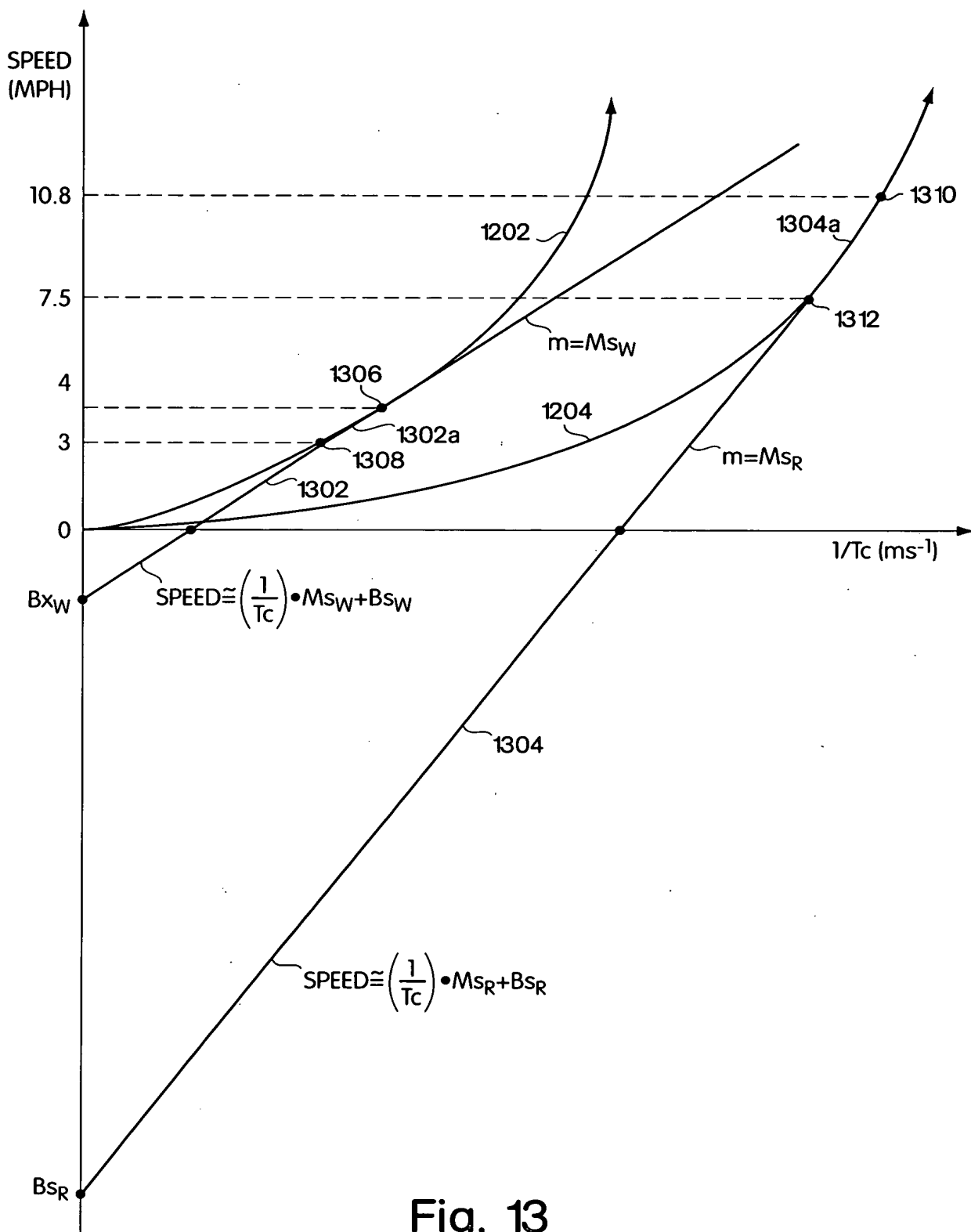


Fig. 13



11/42

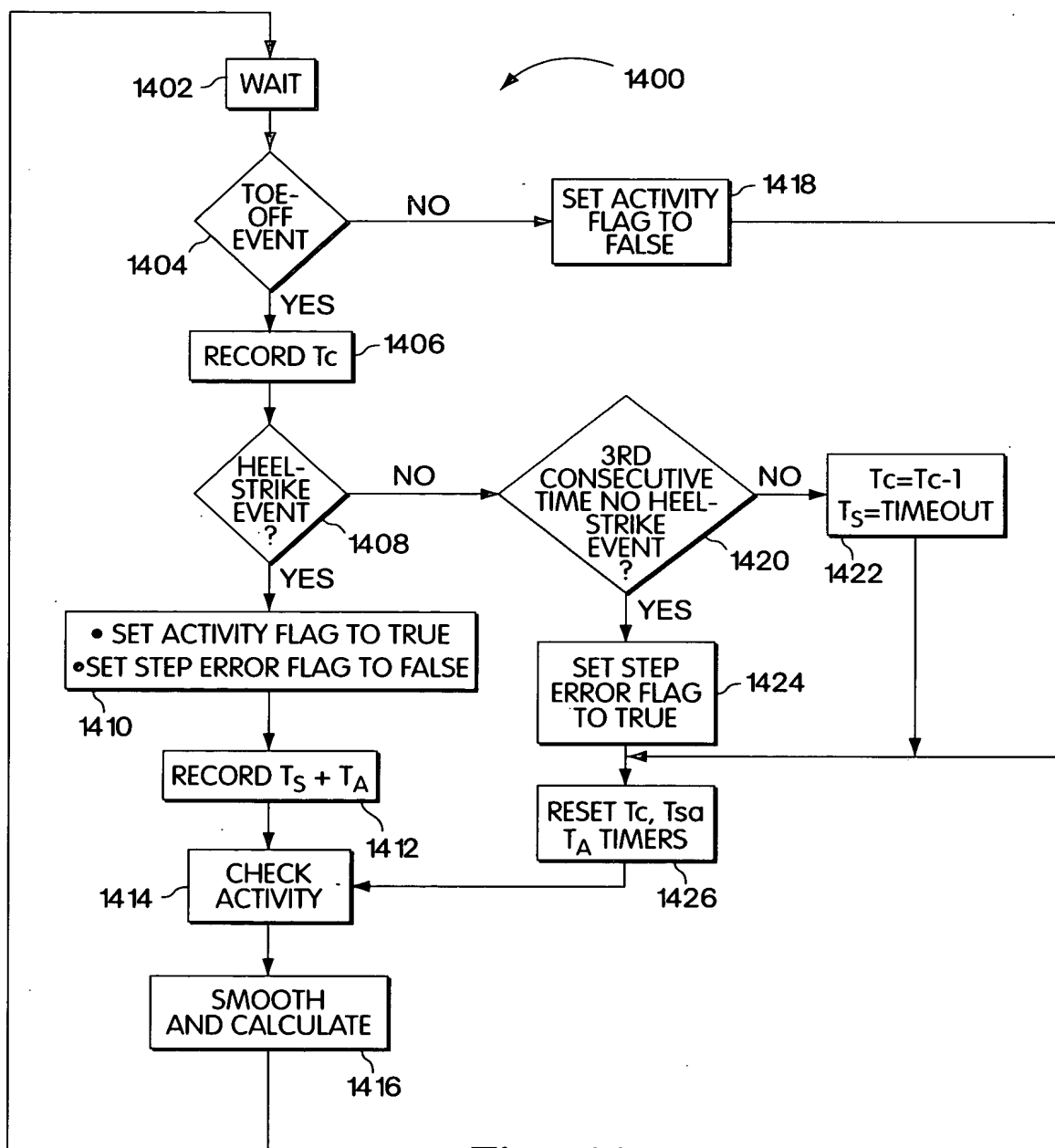


Fig. 14



12/42

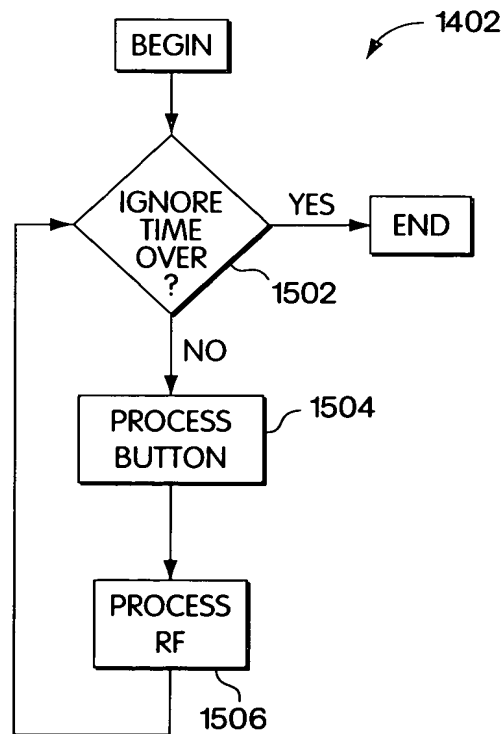


Fig. 15

13/42

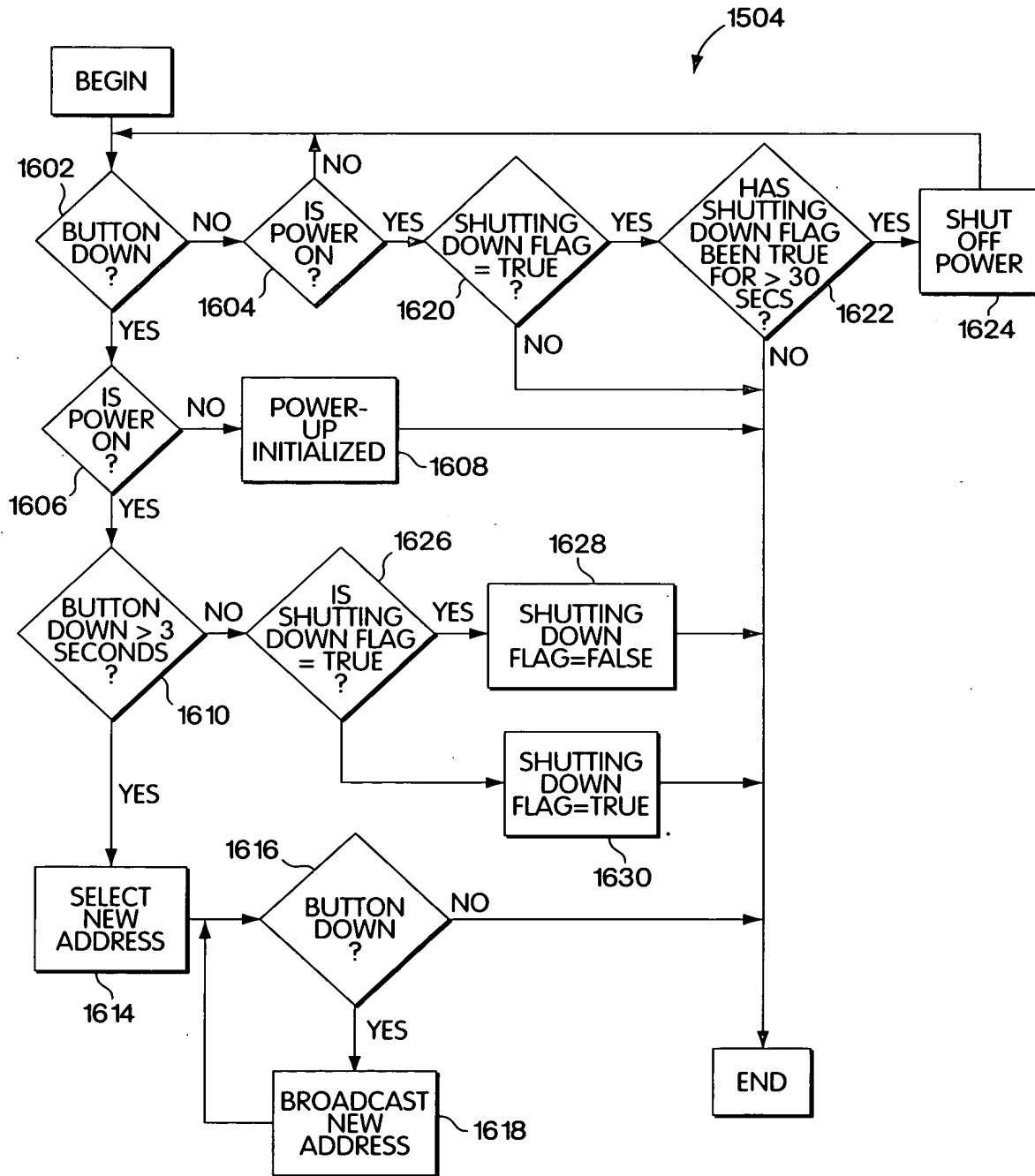


Fig. 16



14/42

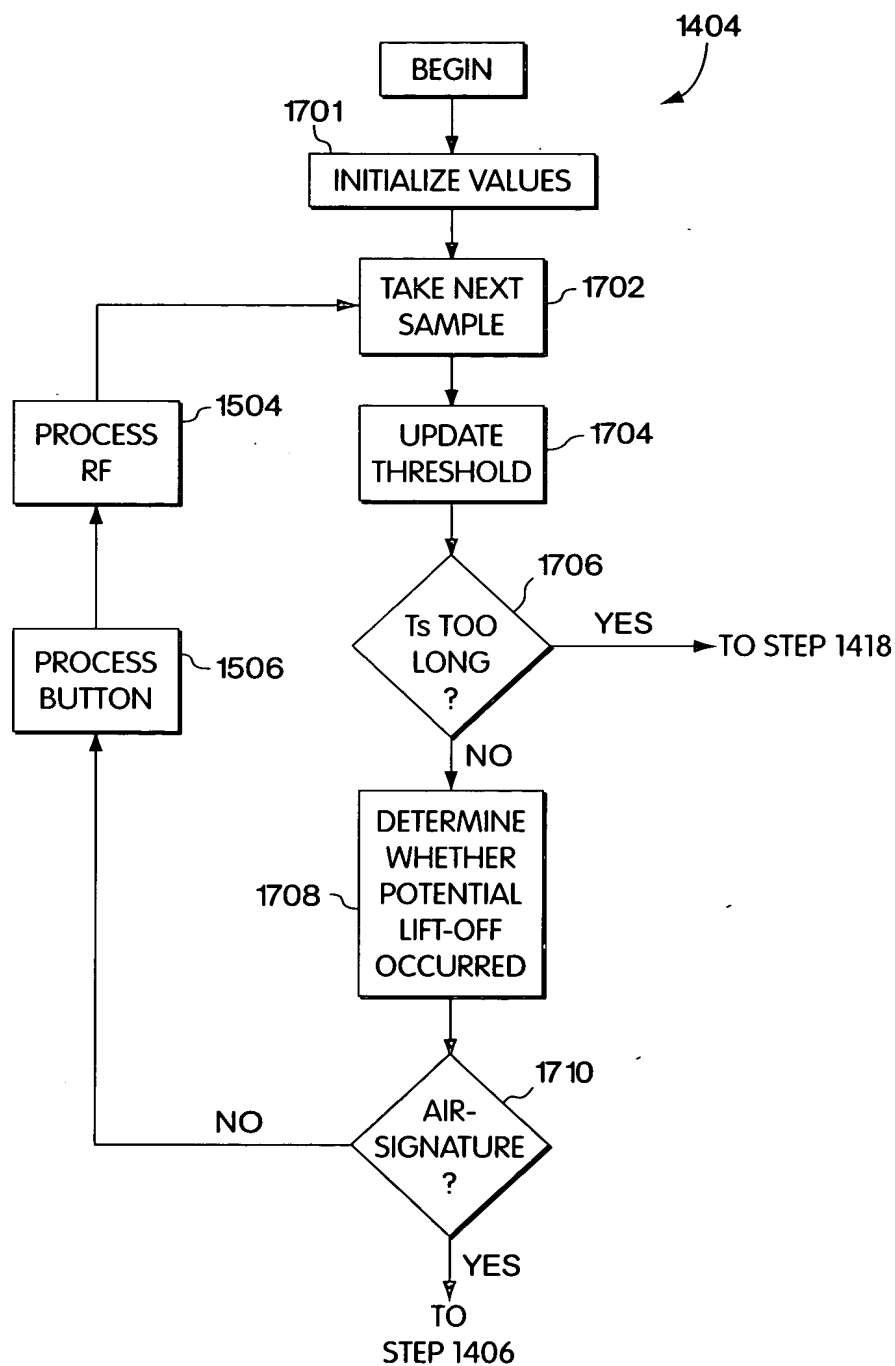


Fig. 17



15/42

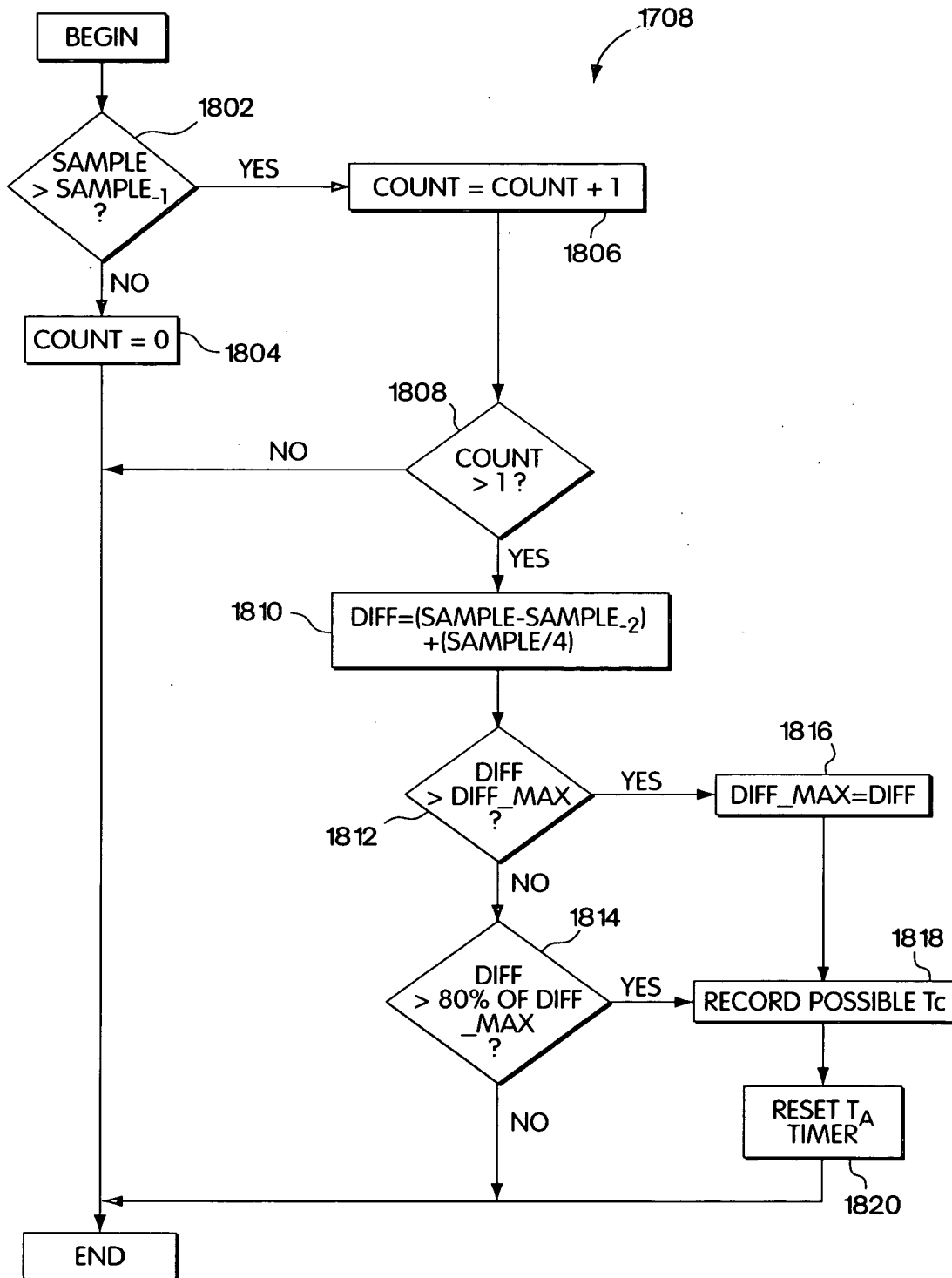


Fig. 18

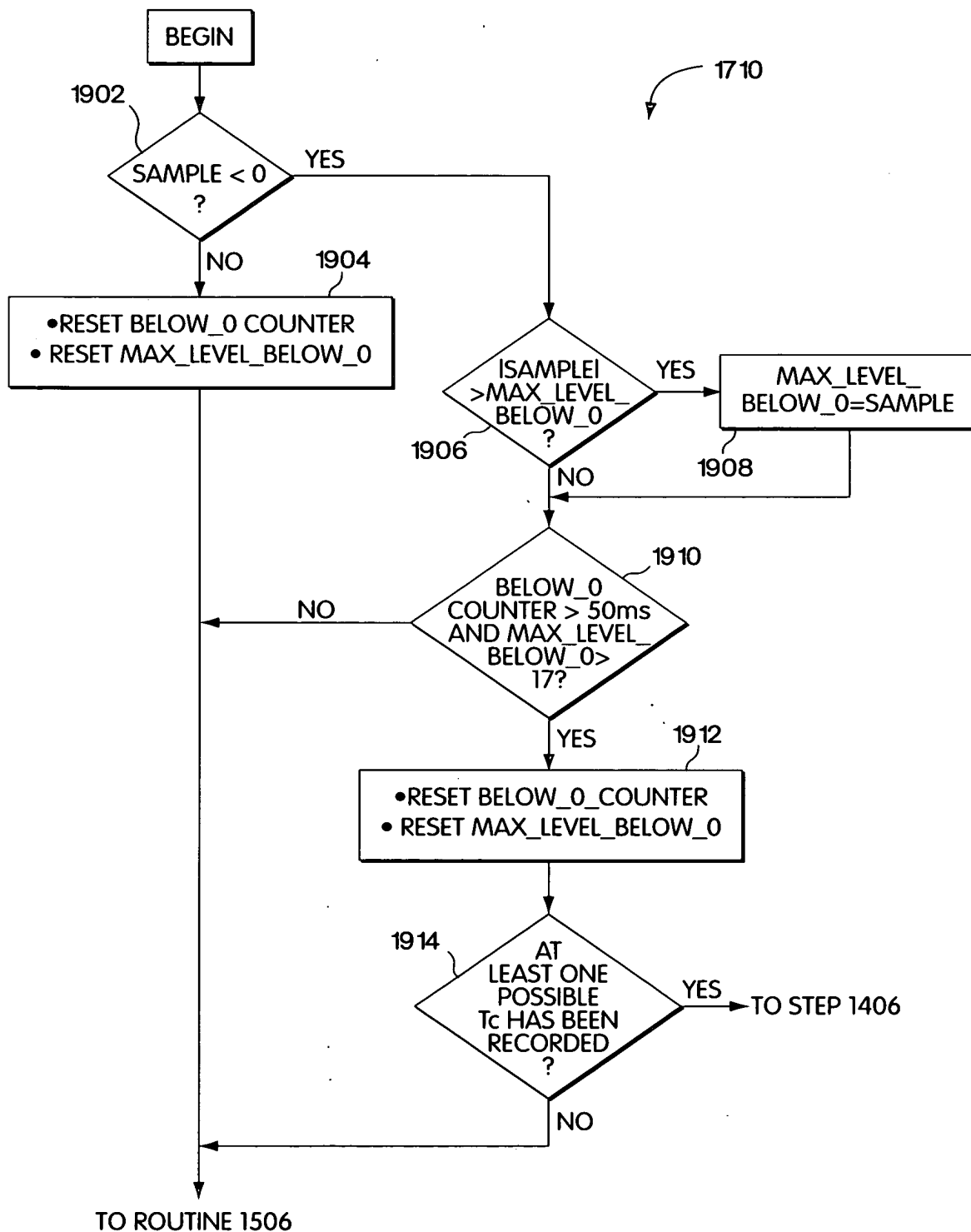


Fig. 19

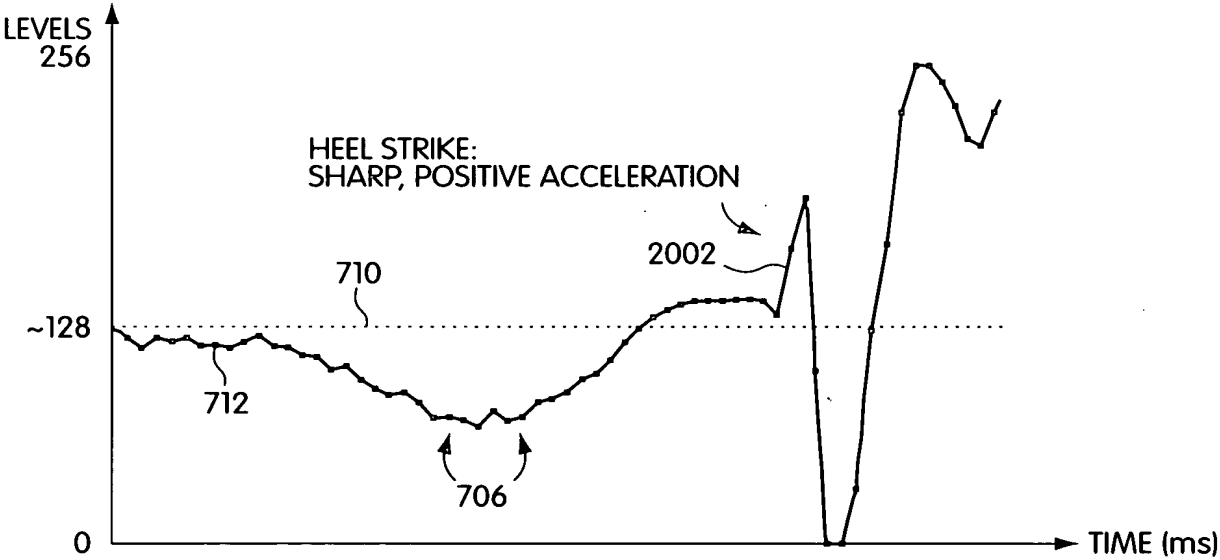


Fig. 20



18/42

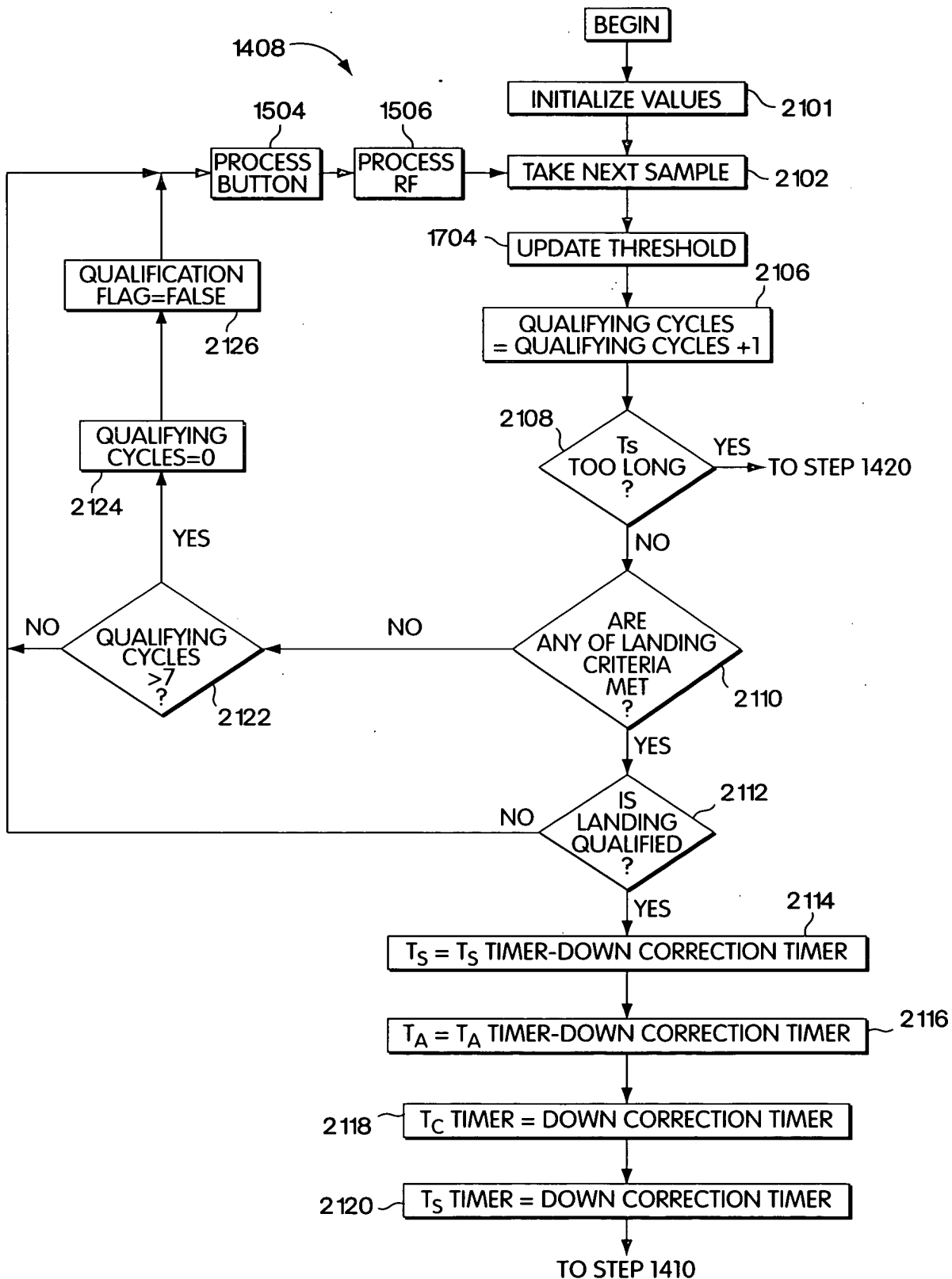
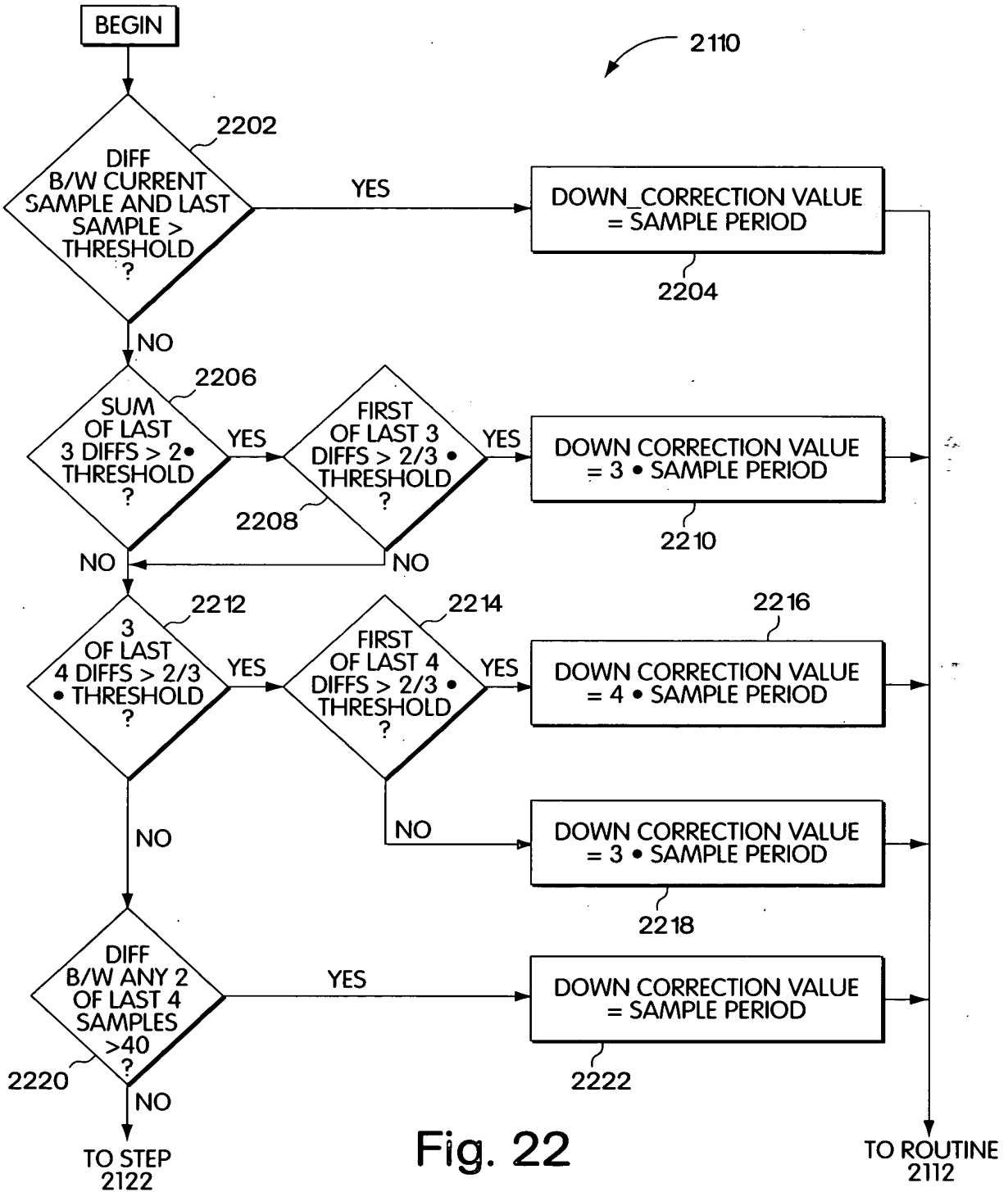


Fig. 21



19/42



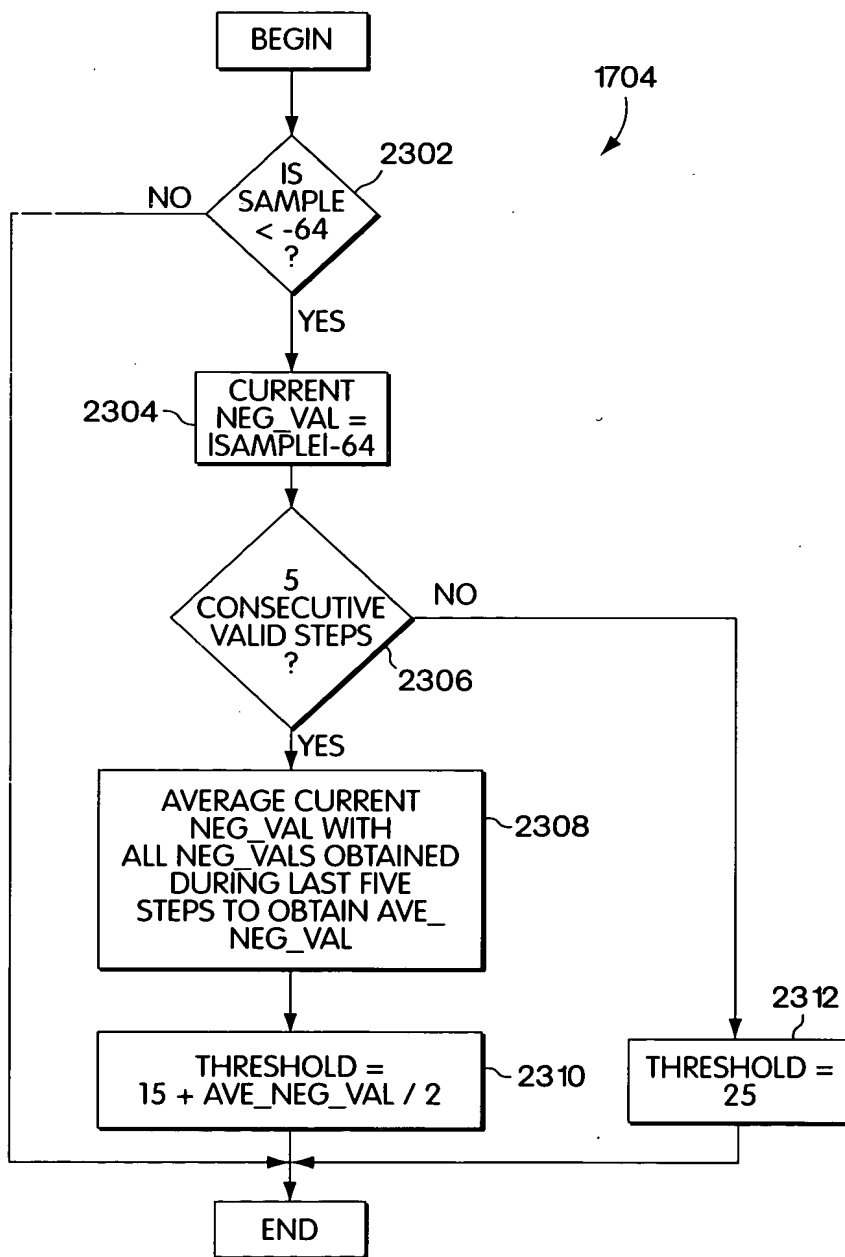


Fig. 23

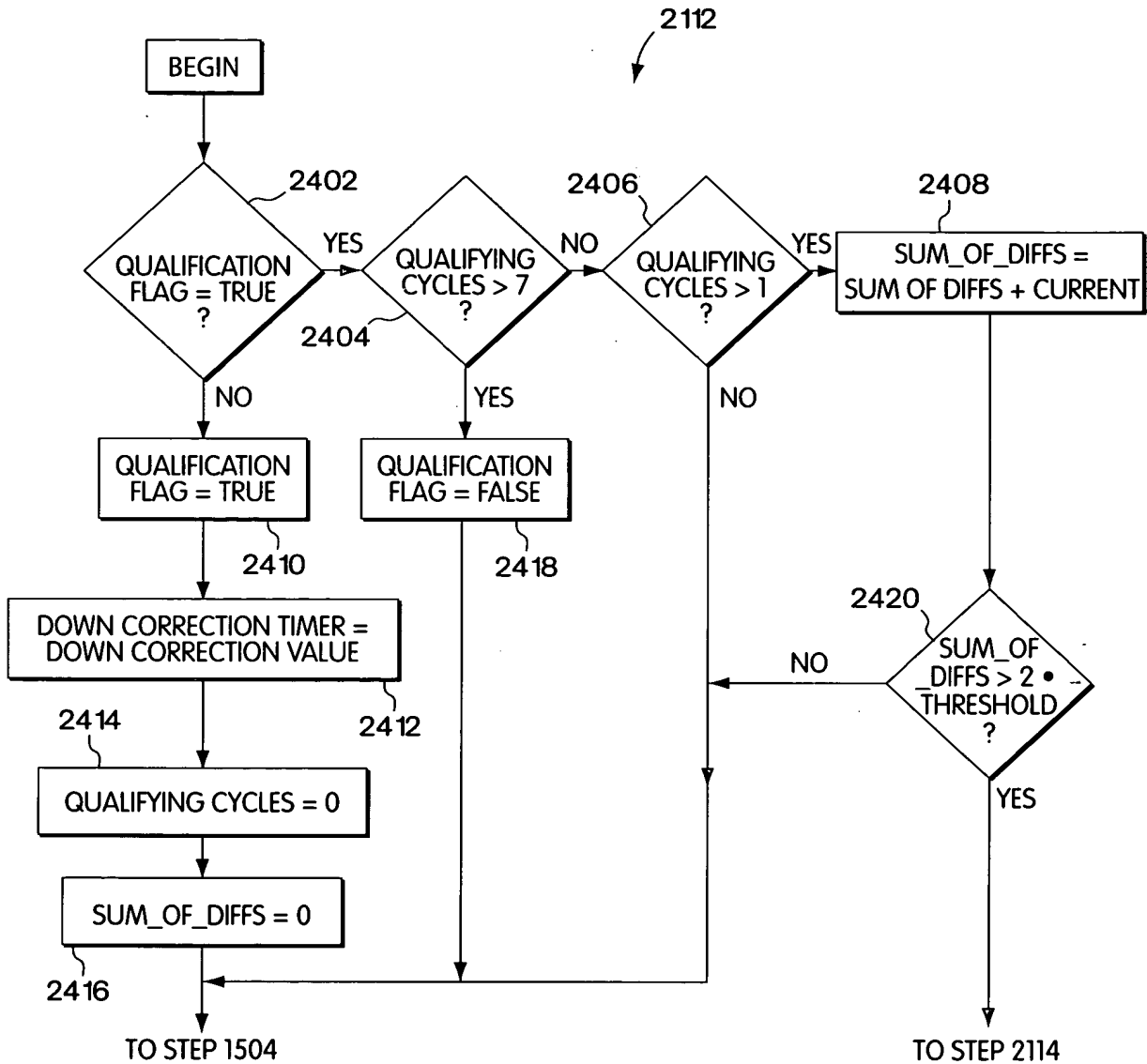


Fig. 24

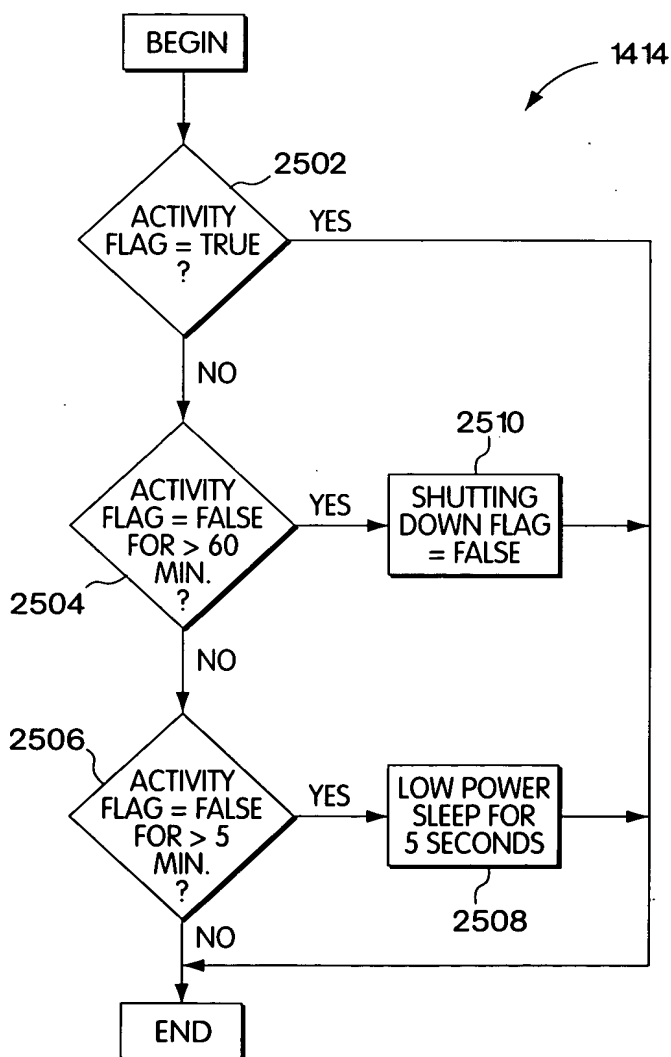


Fig. 25



23/42

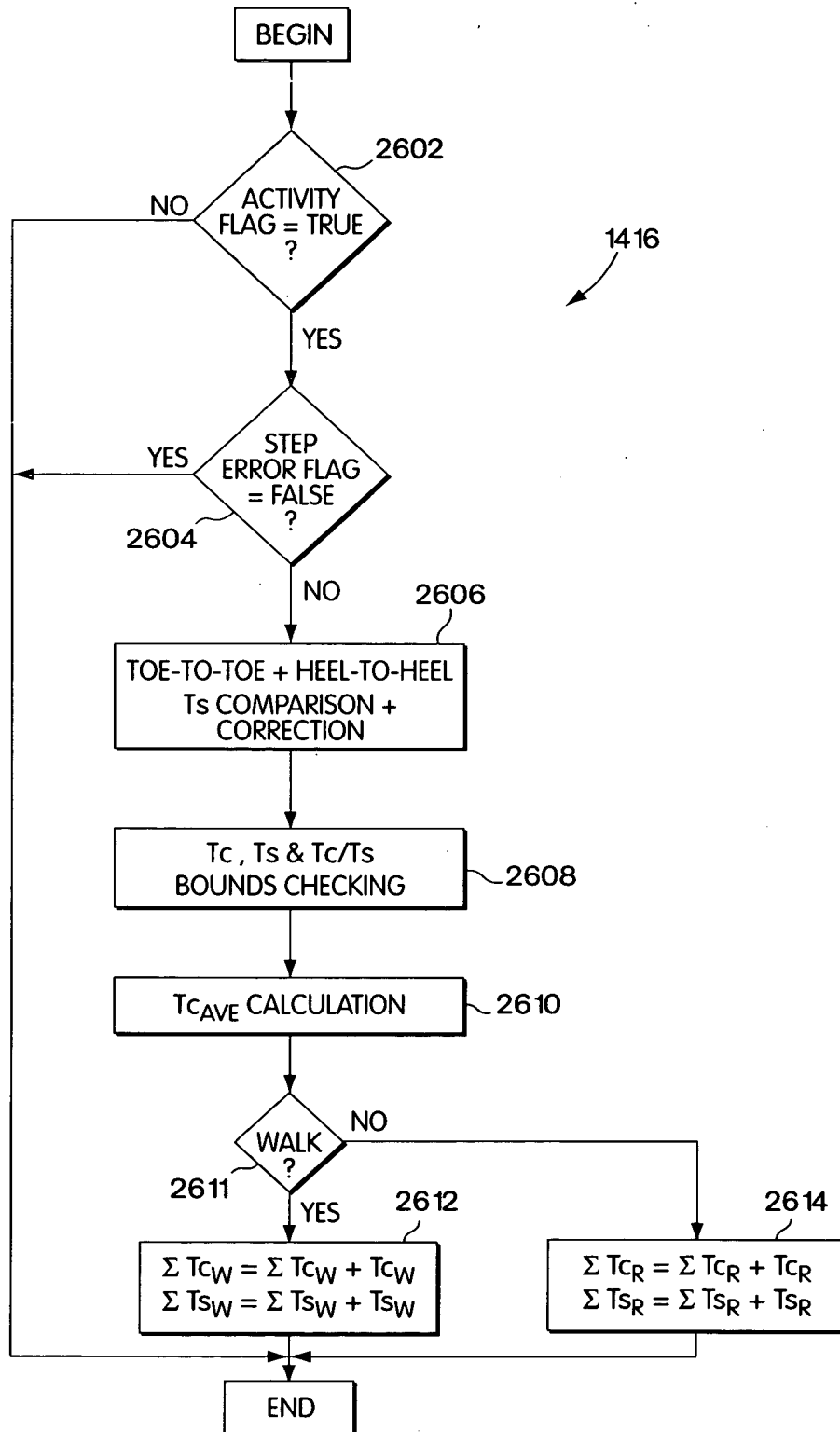


Fig. 26

24/42

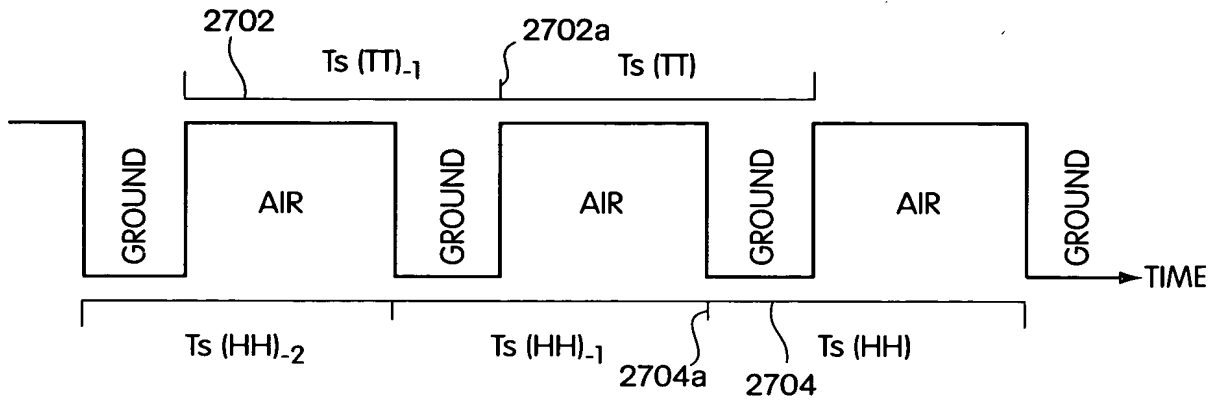


Fig. 27

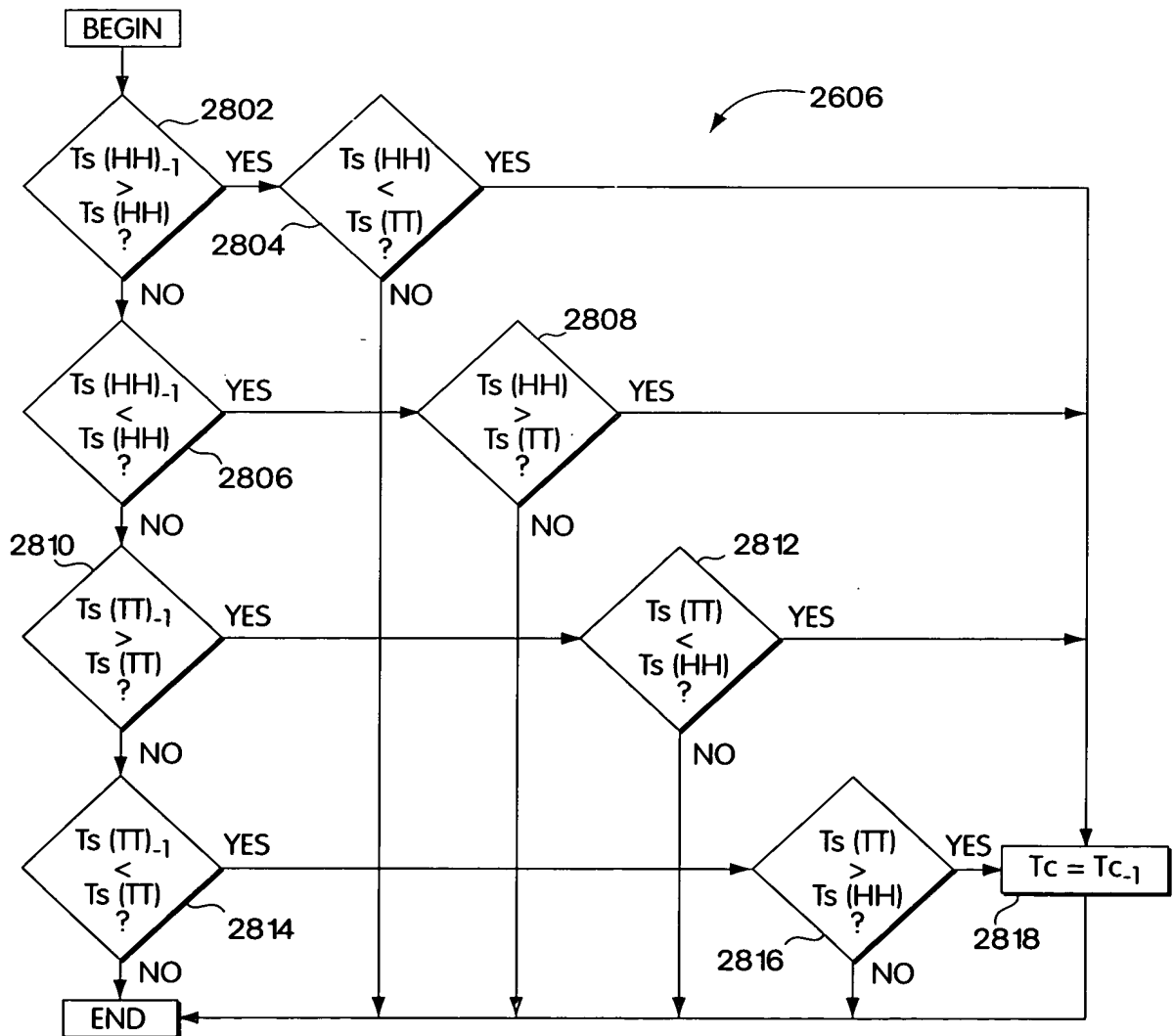


Fig. 28



25/42

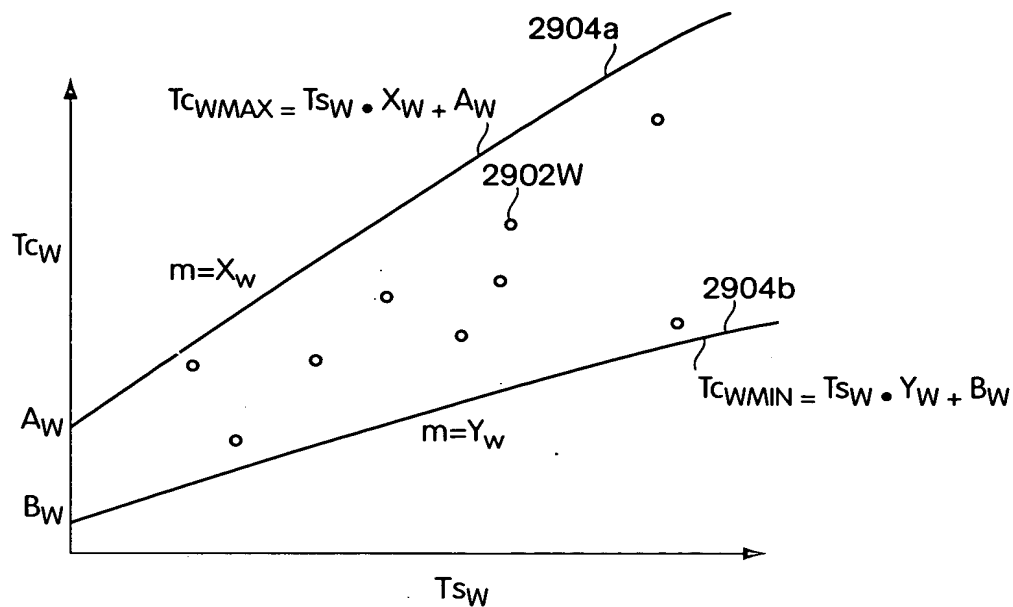


Fig. 29A

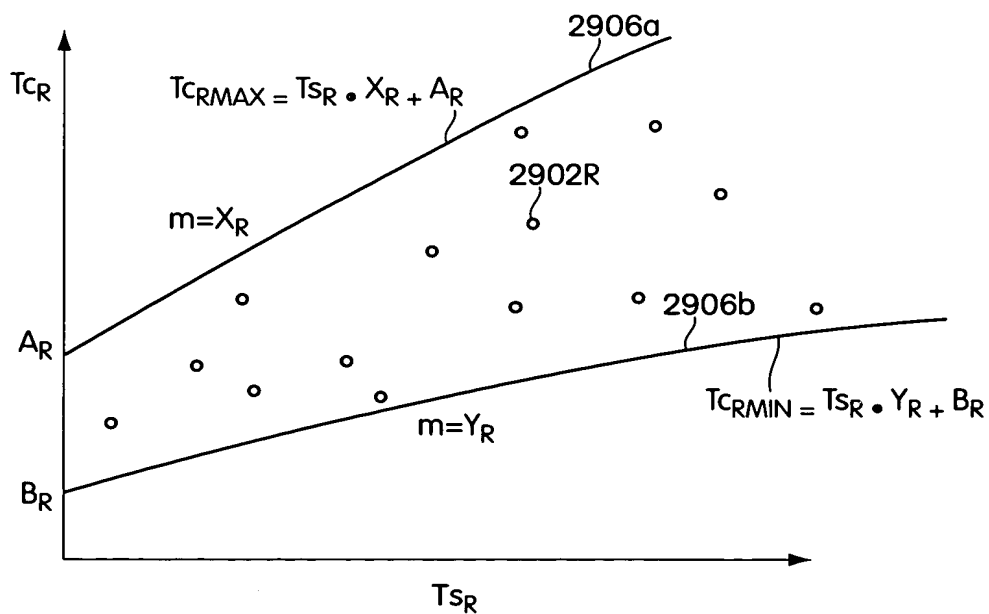


Fig. 29B

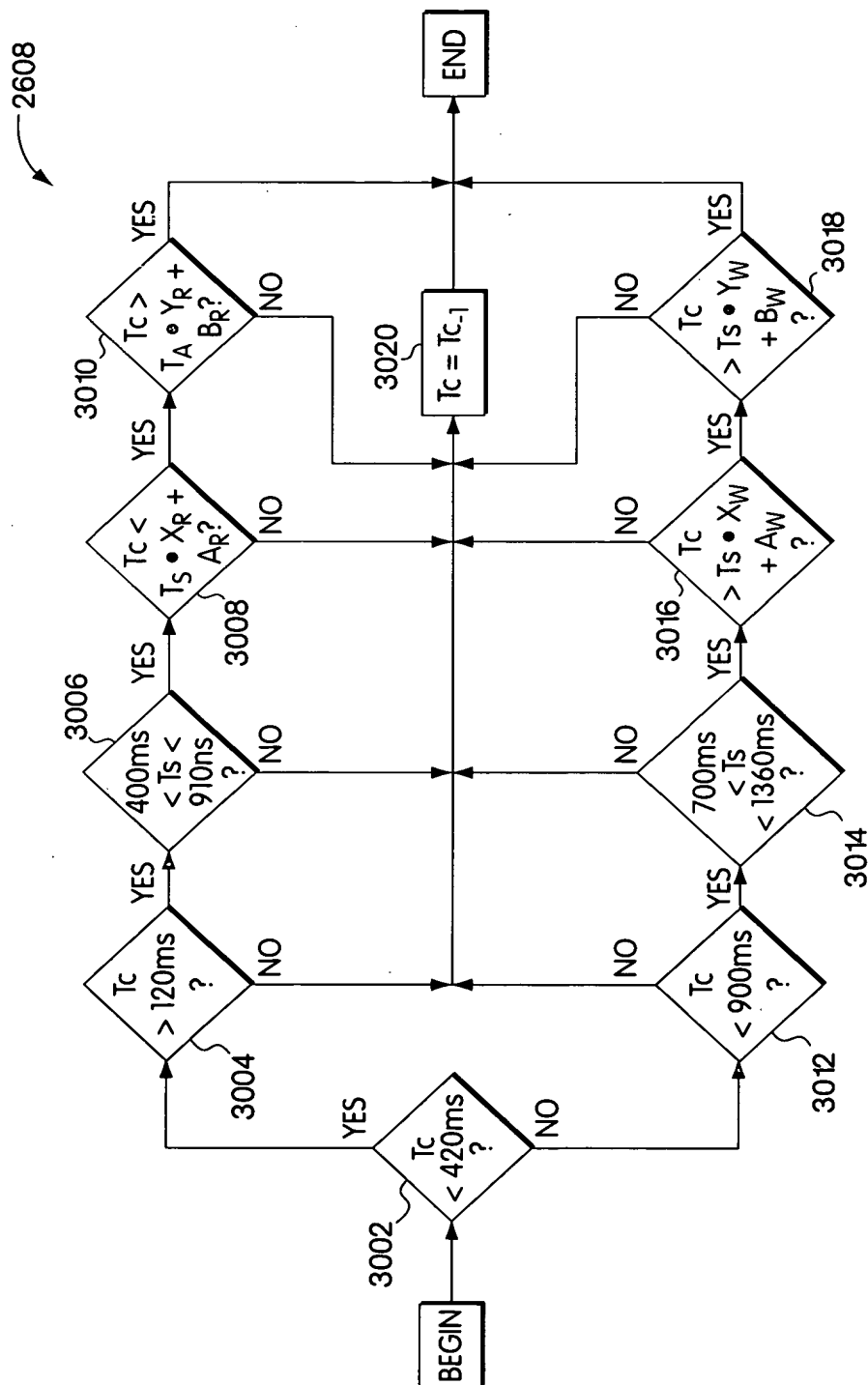


Fig. 30

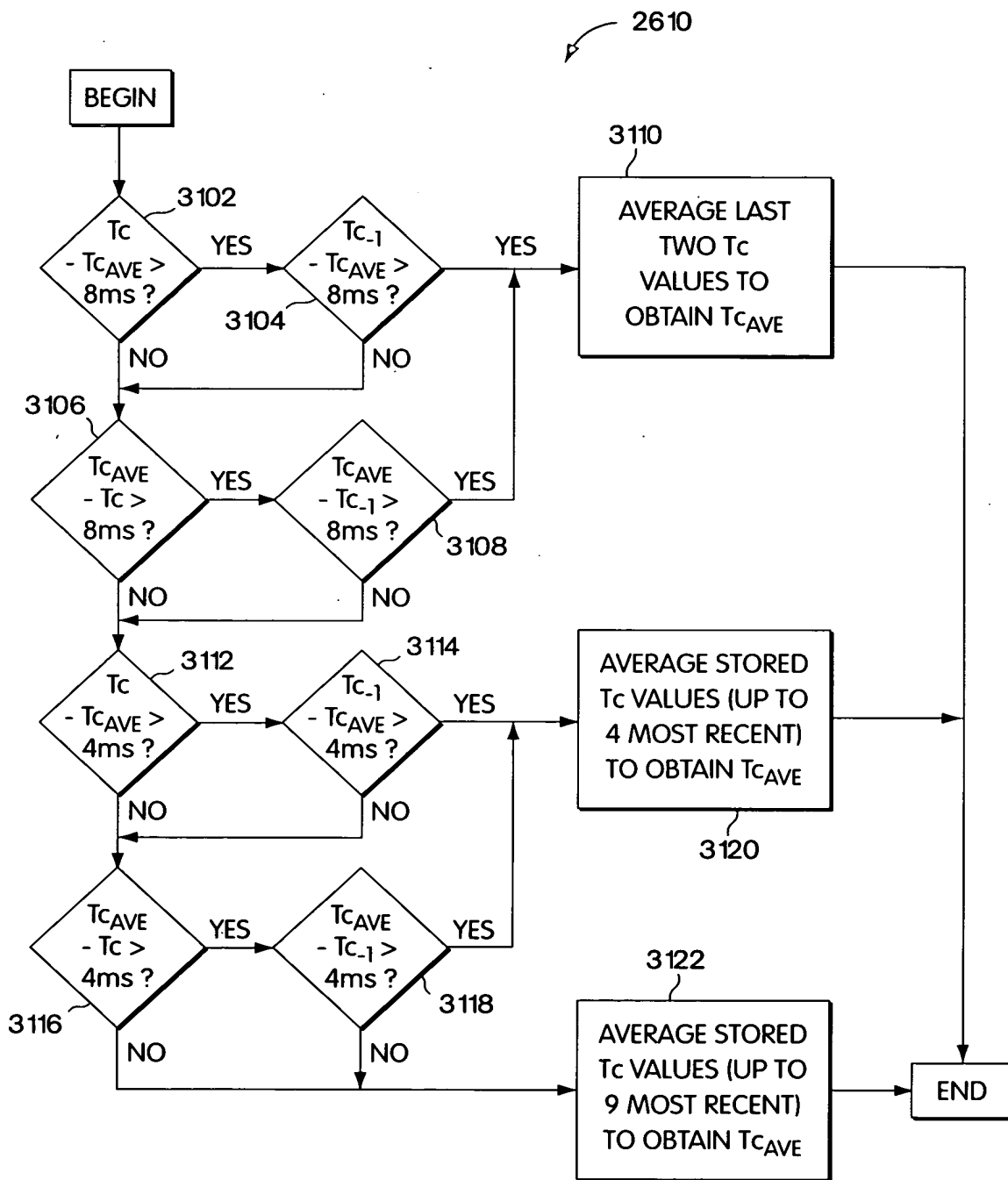


Fig. 31



28/42

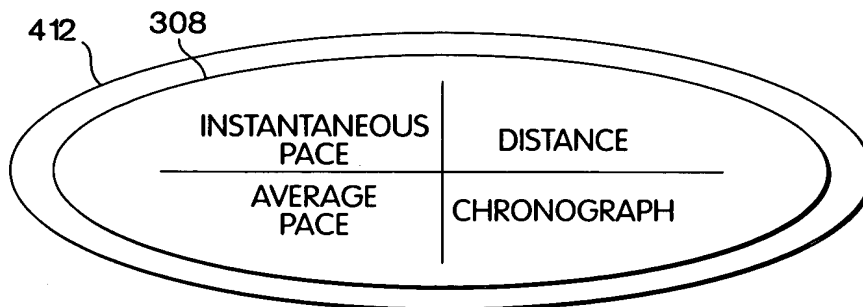


Fig. 32A

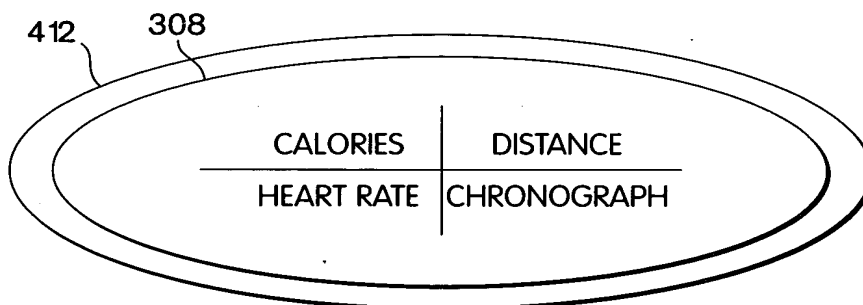


Fig. 32B

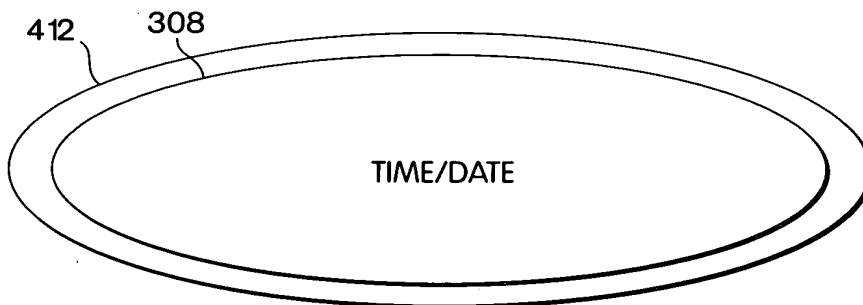


Fig. 32C

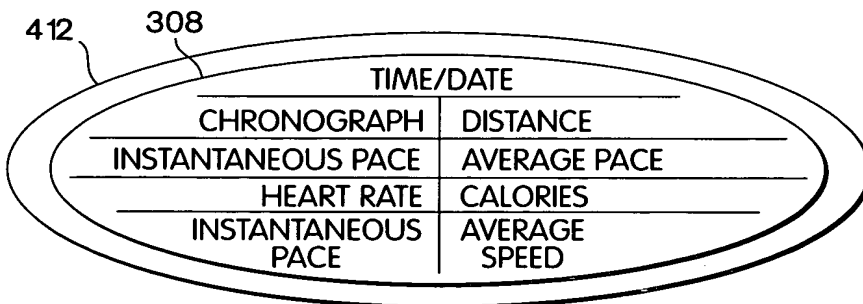


Fig. 32D



29/42

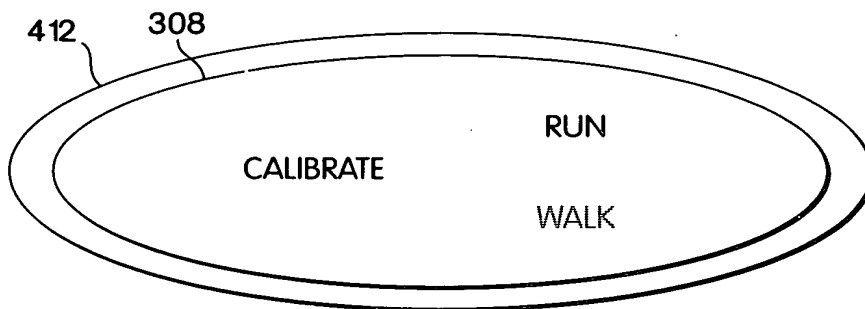


Fig. 32E

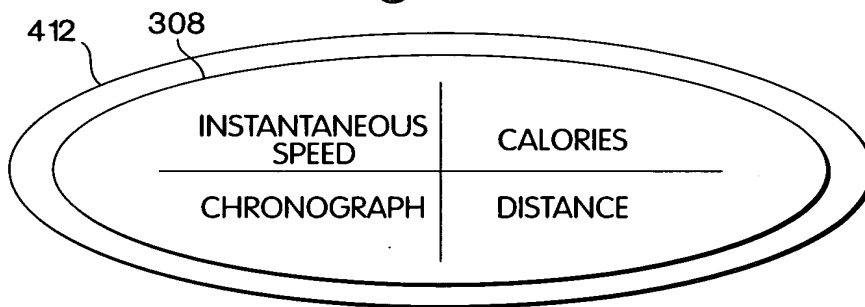


Fig. 32F

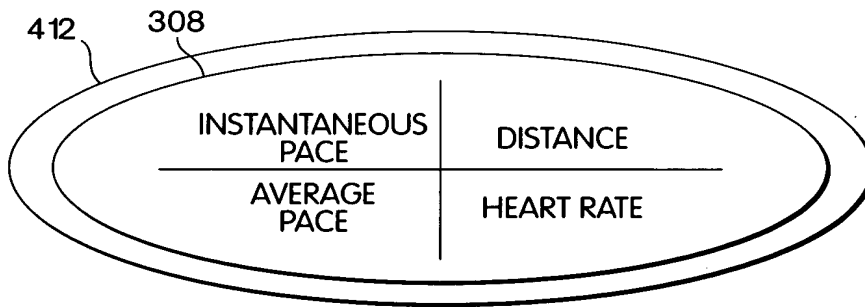


Fig. 32G

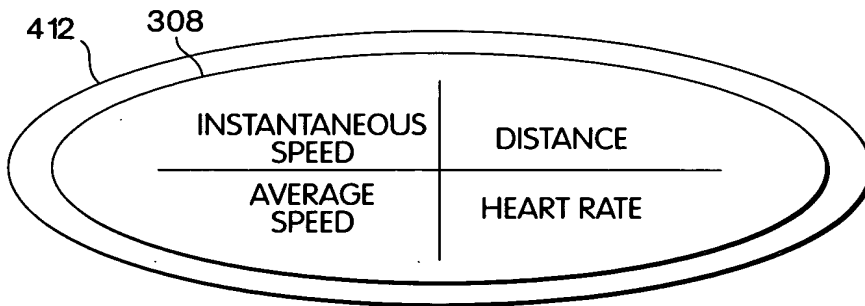


Fig. 32H



MONITORING ACTIVITY OF A
USER IN LOCOMOTION ON FOOT
Blackadar, et al.
Serial No.: 09/643,191
Docket No.: P00663.70019.US (RMA)

30/42

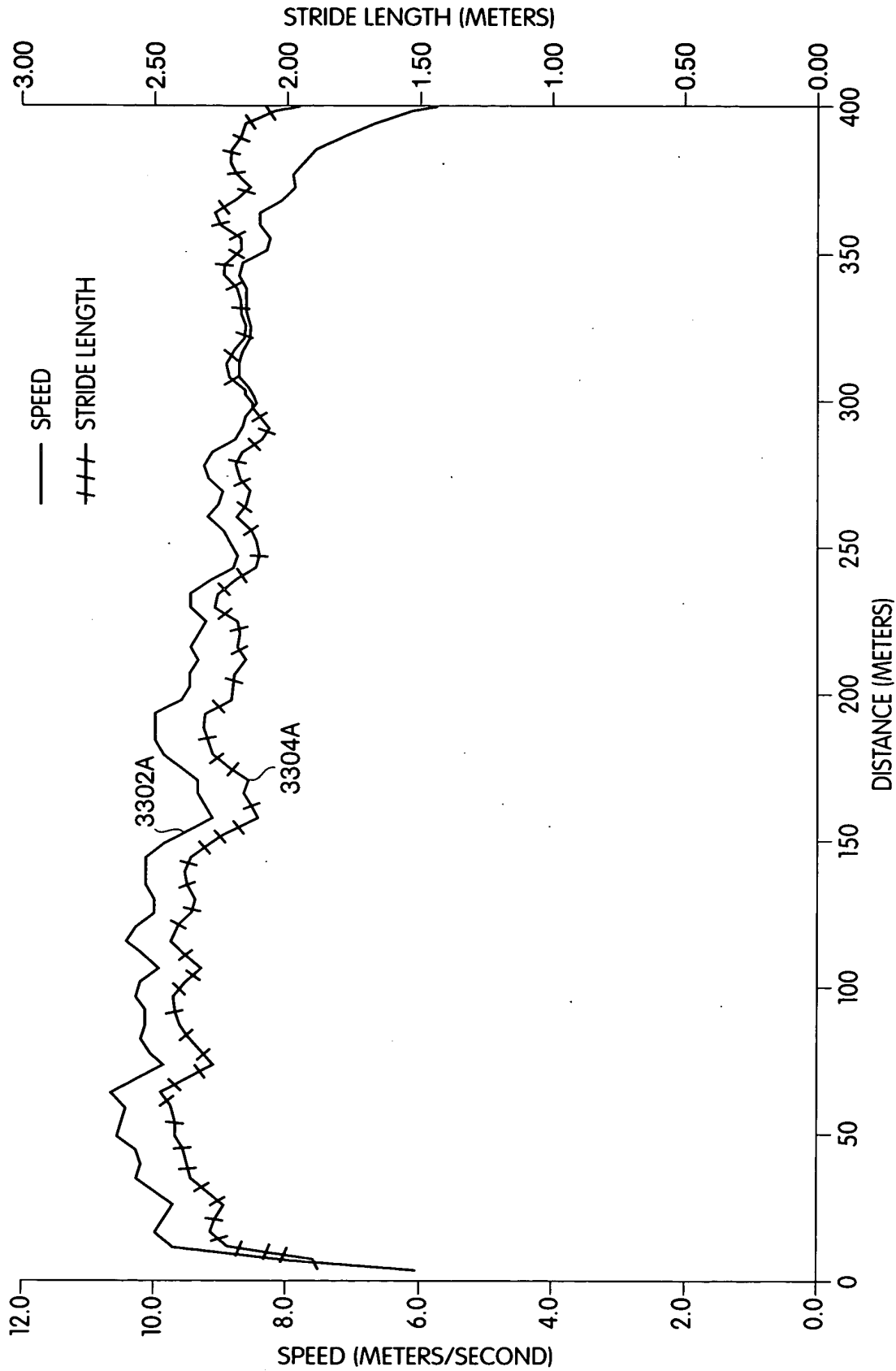


Fig. 33A



MONITORING ACTIVITY OF A
USER IN LOCOMOTION ON FOOT
Blackadar, et al.
Serial No.: 09/643,191
Docket No.: P00663.70019.US (RMA)

31/42

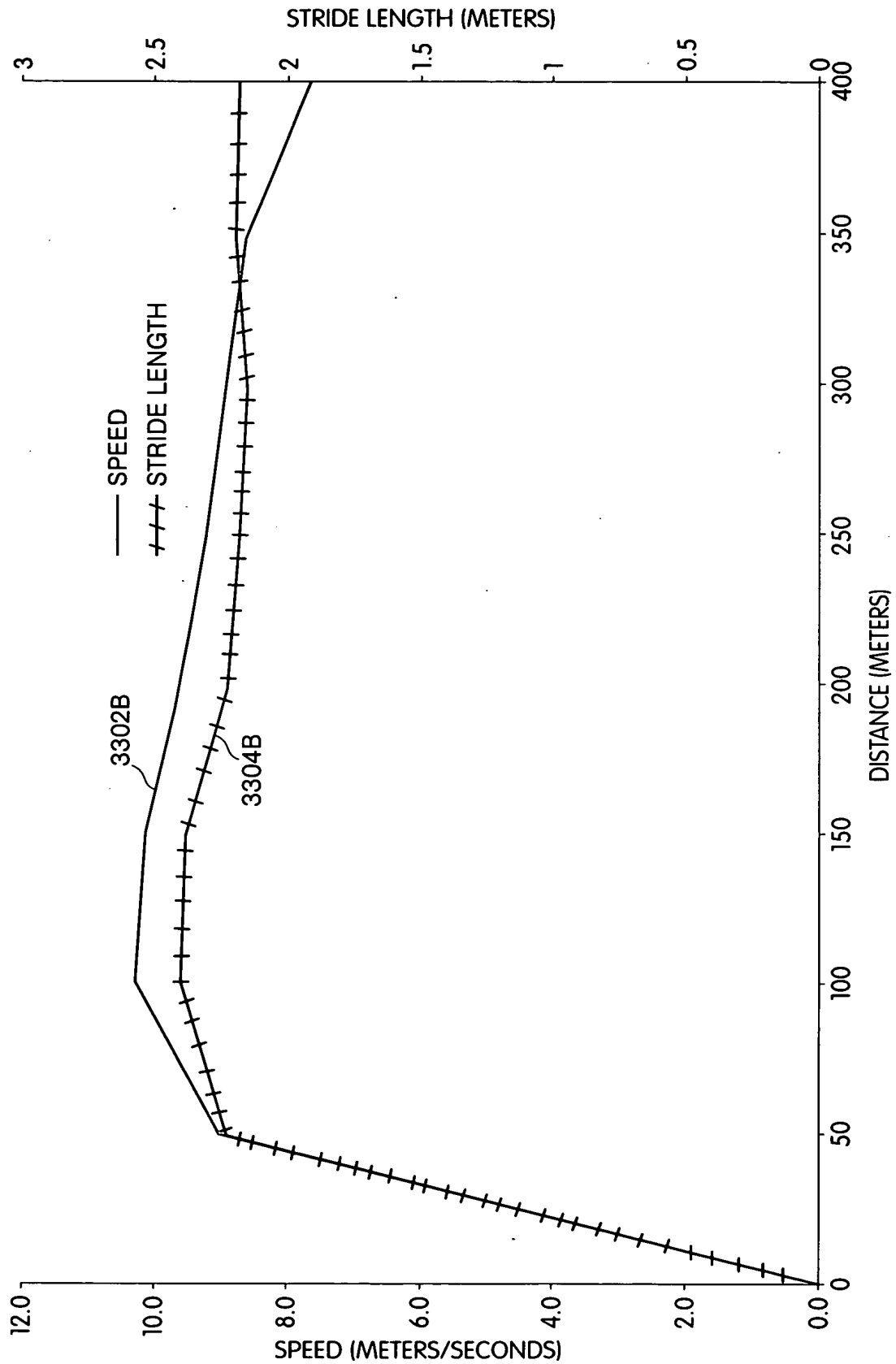


Fig. 33B



MONITORING ACTIVITY OF A
USER IN LOCOMOTION ON FOOT
Blackadar, et al.
Serial No.: 09/643,191
Docket No.: P00663.70019.US (RMA)

32/42

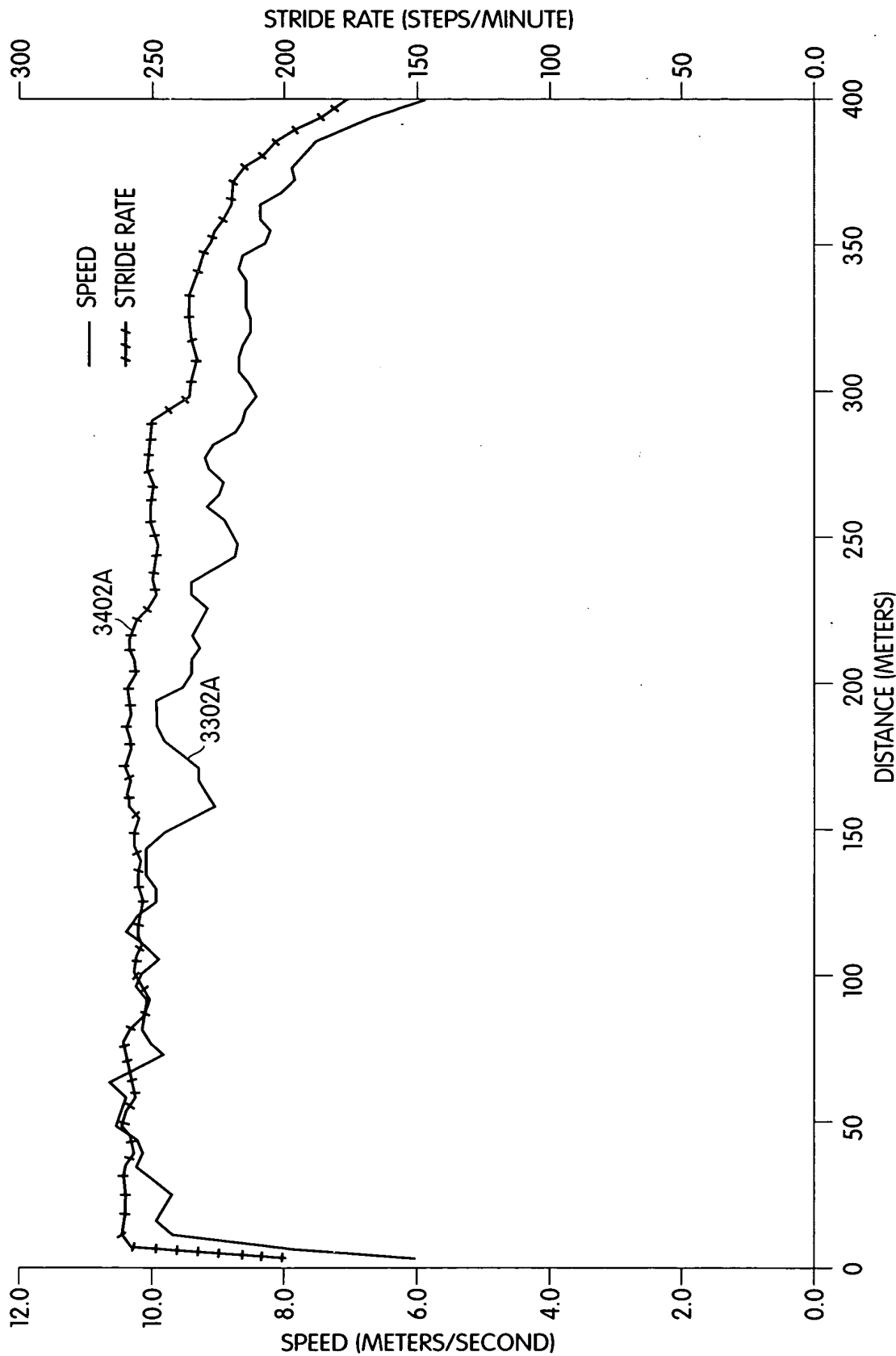


Fig. 34A



MONITORING ACTIVITY OF A
USER IN LOCOMOTION ON FOOT
Blackadar, et al.
Serial No.: 09/643,191
Docket No.: P00663.70019.US (RMA)

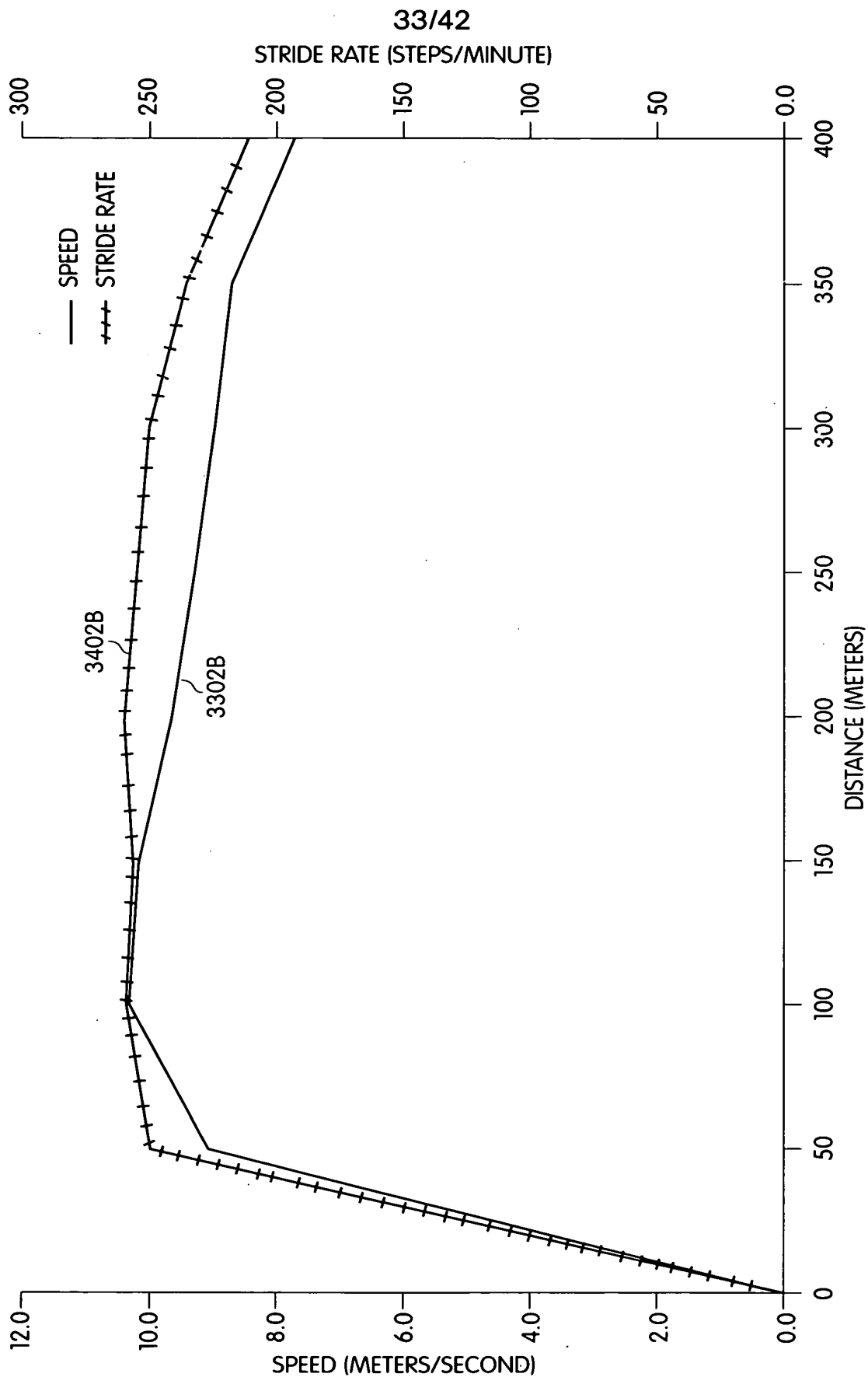


Fig. 34B



MONITORING ACTIVITY OF A
USER IN LOCOMOTION ON FOOT
Blackadar, et al.
Serial No.: 09/643,191
Docket No.: P00663.70019.US (RMA)

34/42

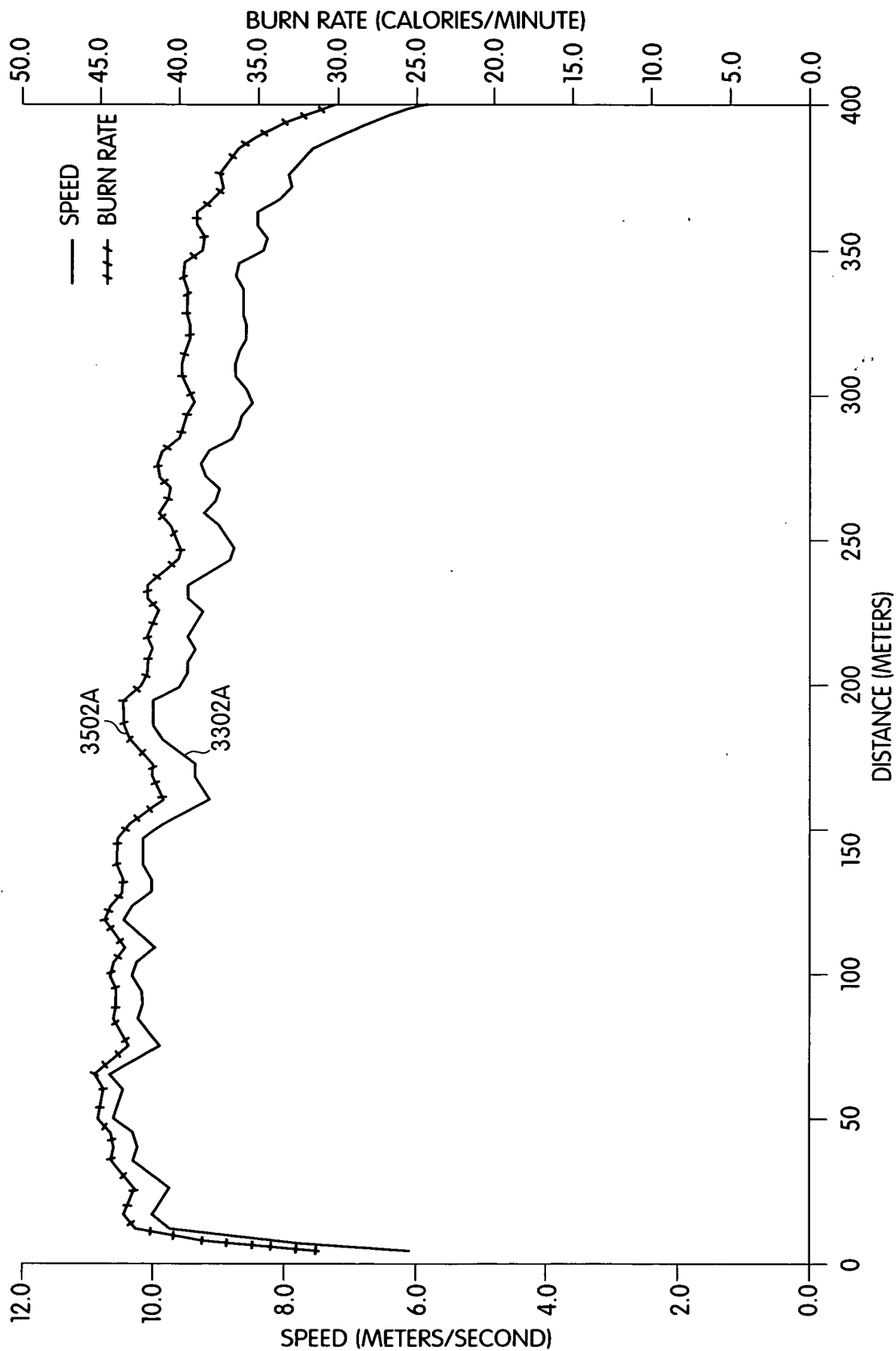


Fig. 35A



MONITORING ACTIVITY OF A
USER IN LOCOMOTION ON FOOT
Blackadar, et al.
Serial No.: 09/643,191
Docket No.: P00663.70019.US (RMA)

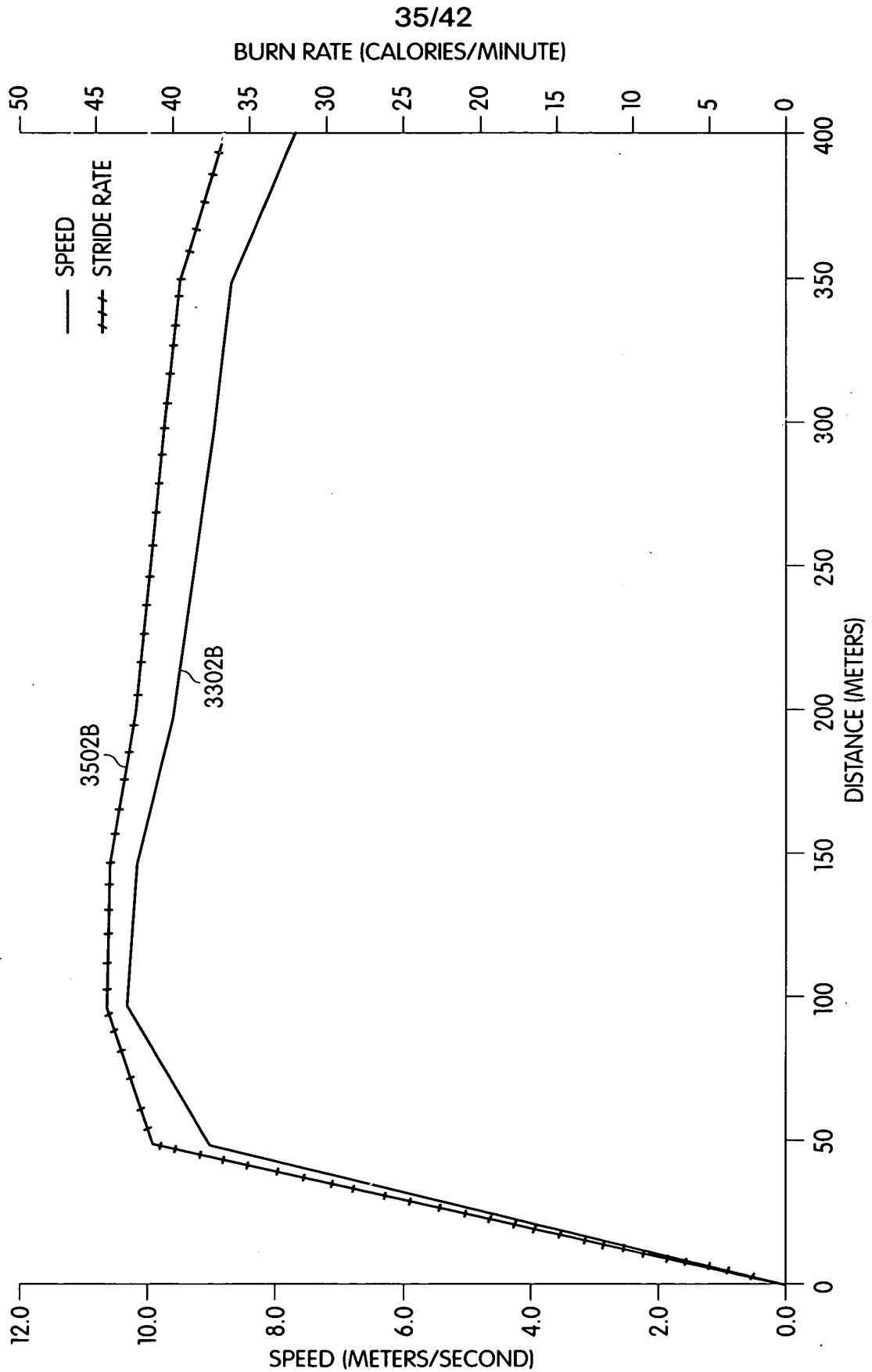


Fig. 35B



MONITORING ACTIVITY OF A
USER IN LOCOMOTION ON FOOT
Blackadar, et al.
Serial No.: 09/643,191
Docket No.: P00663.70019.US (RMA)

36/42

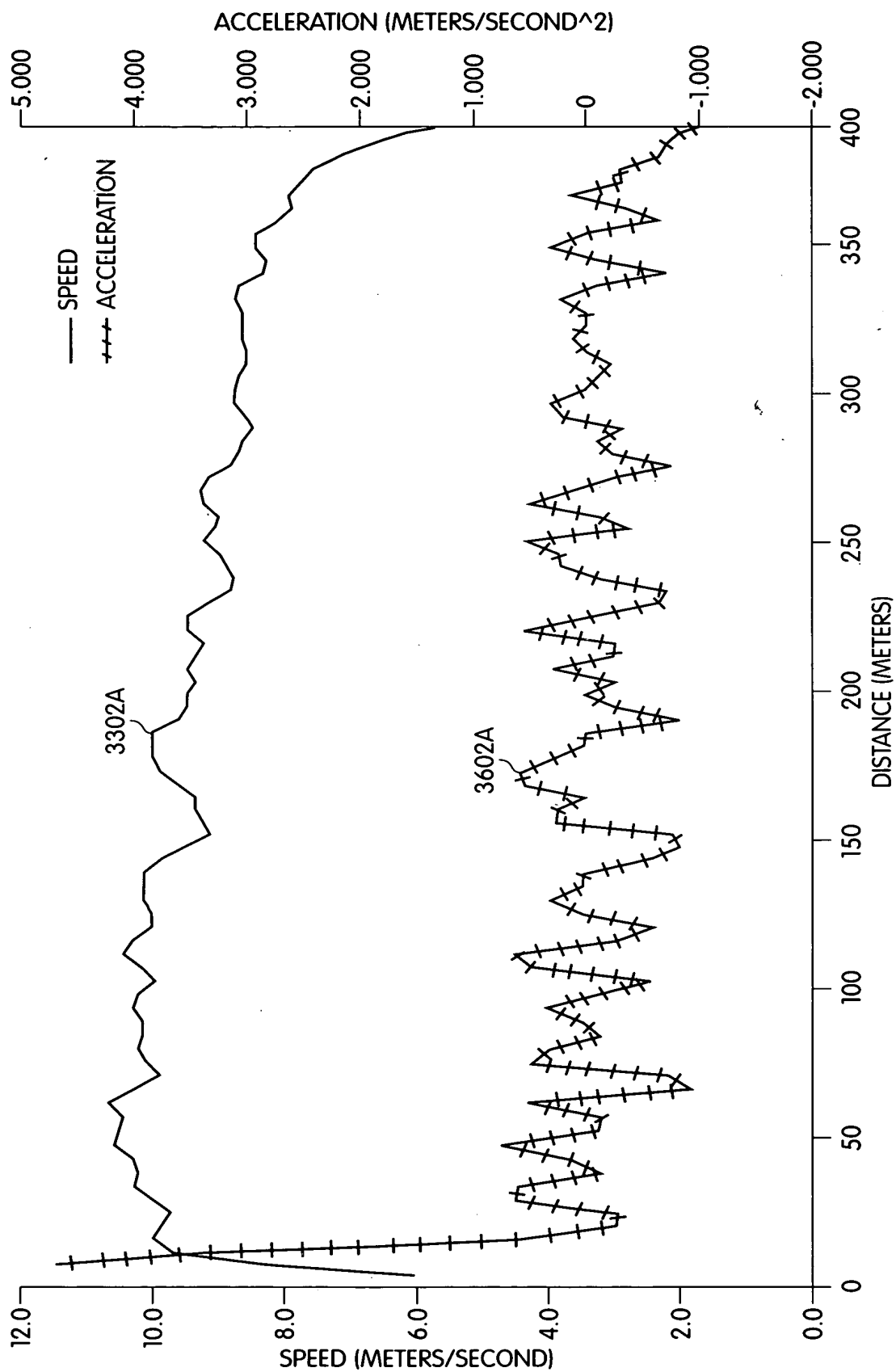


Fig. 36A



MONITORING ACTIVITY OF A
USER IN LOCOMOTION ON FOOT
Blackadar, et al.
Serial No.: 09/643,191
Docket No.: P00663.70019.US (RMA)

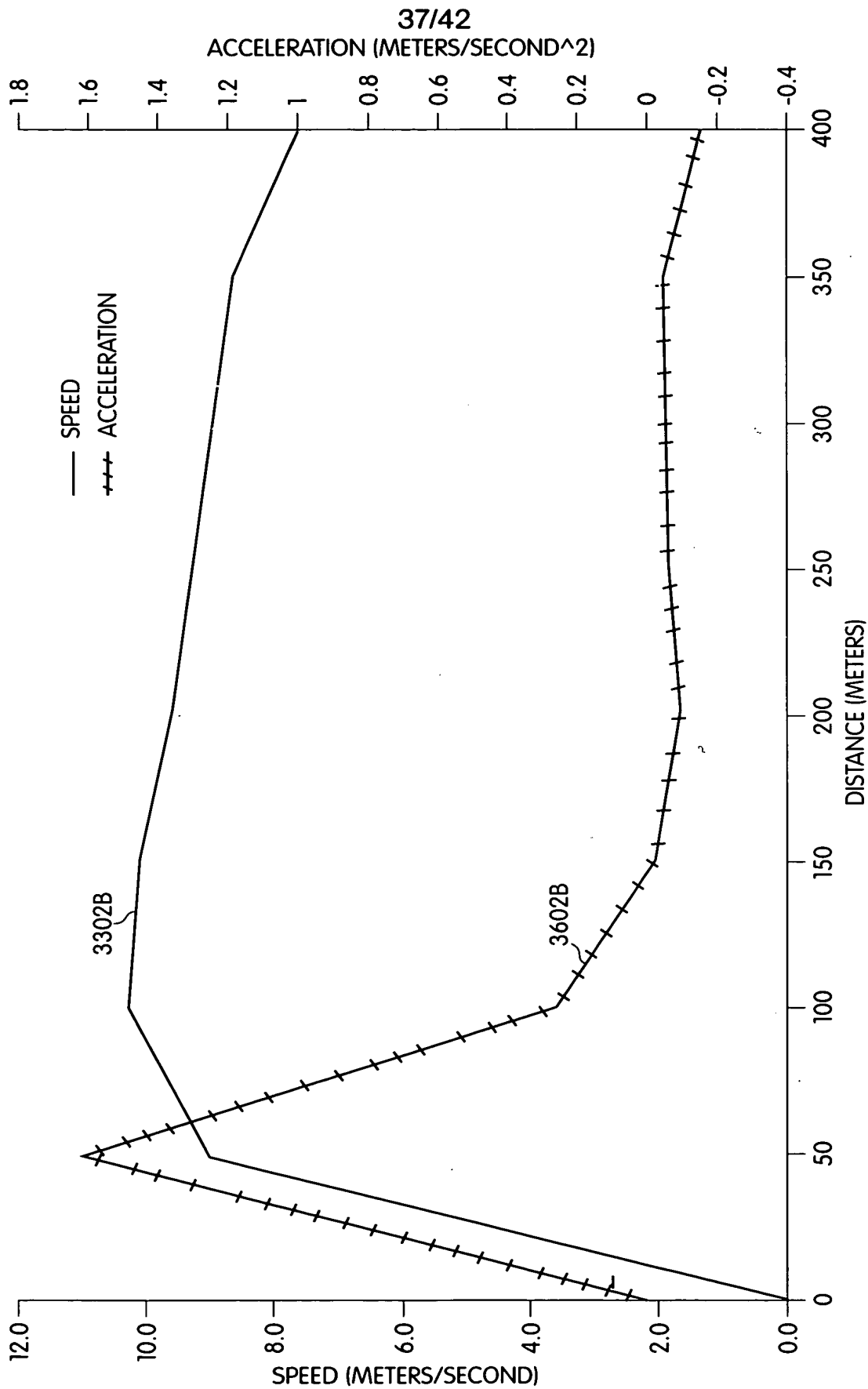


Fig. 36B



MONITORING ACTIVITY OF A
USER IN LOCOMOTION ON FOOT
Blackadar, et al.
Serial No.: 09/643,191
Docket No.: P00663.70019.US (RMA)

38/42

DISTANCE	RACE TIME	SPLIT TIME	AVERAGE SPEED	AVERAGE STRIDE LENGTH	AVERAGE STRIDE LENGTH		AVERAGE STRIDE RATE	AVERAGE BURN RATE	TOTAL CALORIES	ACCELERATION
METERS	SECONDS	SECONDS	METERS/SECOND	MPH	METERS	FEET	STEPS/MINUTE	CALORIES/MINUTE	CALORIES	METERS/SECOND
0	0	0	0	0	0	0	0	0	0	0
50	5.6	5.6	9.0	20.1	2.22	7 3	249.5	41.1	3.7	1.621
100	10.4	4.9	10.3	22.9	2.39	7 9	257.9	44.2	7.3	0.257
150	15.4	4.9	10.1	22.6	2.37	7 9	256.1	43.9	10.9	-0.030
200	20.6	5.2	9.6	21.4	2.22	7 3	259.7	42.3	14.6	-0.100
250	26.0	5.4	9.2	20.7	2.18	7 1	255.1	41.3	18.3	-0.063
300	31.6	5.6	8.9	20.0	2.15	7 0	250.4	40.5	22.1	-0.054
350	37.4	5.8	8.7	19.4	2.20	7 2	236.1	39.6	25.9	-0.048
400	43.9	6.5	7.6	17.1	2.18	7 1	211.1	36.5	29.9	-0.155
SPLITS										

Fig. 37



MONITORING ACTIVITY OF A
USER IN LOCOMOTION ON FOOT
Blackadar, et al.
Serial No.: 09/643,191
Docket No.: P00663.70019.US (RMA)

39/42

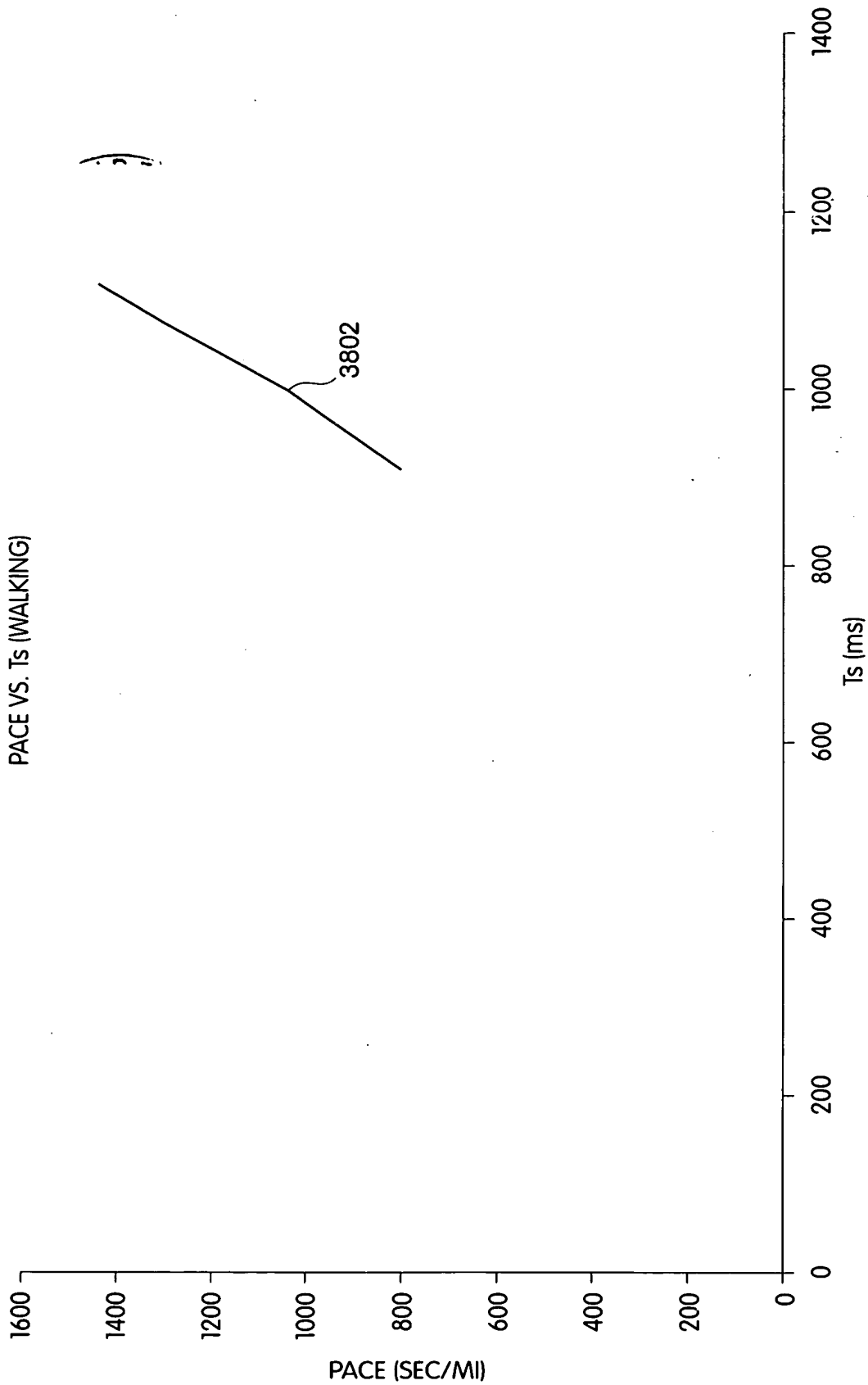


Fig. 38

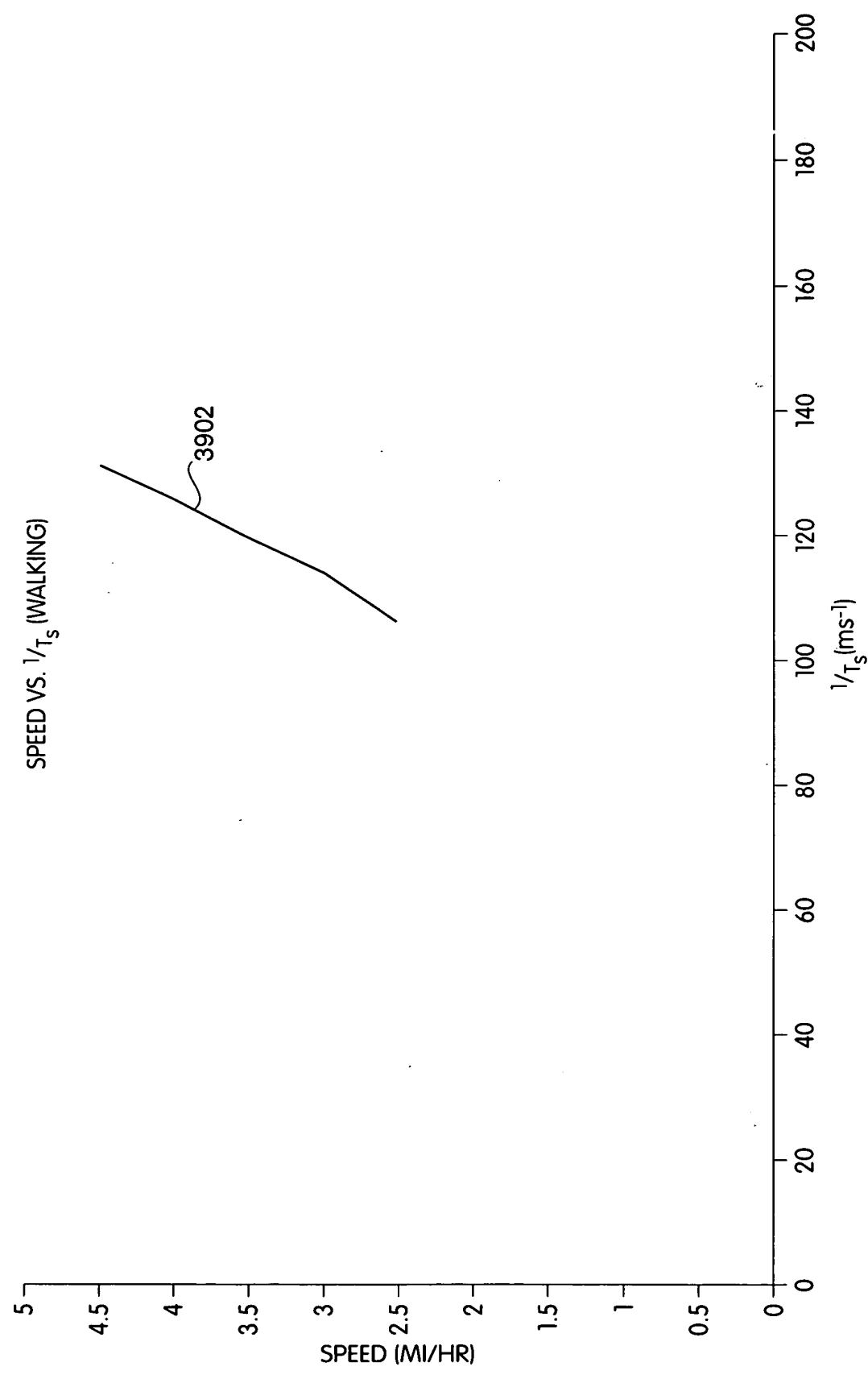


Fig. 39



MONITORING ACTIVITY OF A
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Blackadar, et al.
Serial No.: 09/643,191
Docket No.: P00663.70019.US (RMA)

41/42

SPEED (MPH)	PACE (SECONDS/MILE)	Tc (ms)	Ts (ms)	AVERAGE GROUND FORCE (LBS)	STEPS PER MILE	STRESS PER 1/10 MILE (LBS)	STEPS PER MINUTE	STRESS PER MINUTE (LBS)
5	720	302	730	181	986	17881	82	14901
6	600	270	702	195	855	16667	85	16667
7	514	254	676	200	760	15177	89	17717
8	450	234	652	209	690	14423	92	19231
9	400	214	638	224	627	14019	94	21028
10	360	204	618	227	583	13235	97	22059
11	327	190	600	237	545	12908	100	23684

Fig. 40



42/42

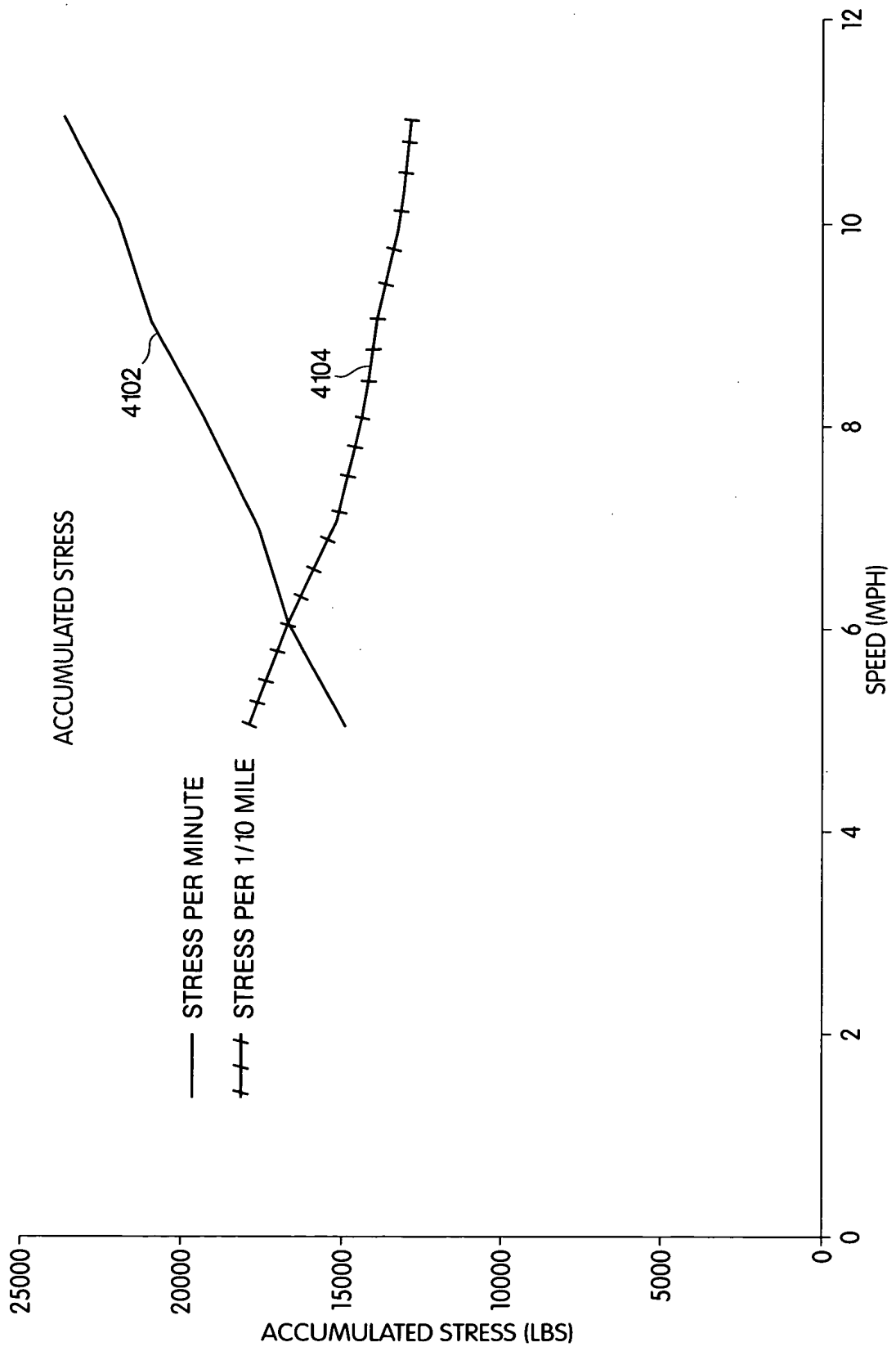


Fig. 41